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AUTHOR	Smith, Lawrence G., Comp.
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ABSTRACT

The validity of traditional grading practices is currently under study at Grossmont College. This report was undertaken as a working base for a committee to study the grading policy. Arguments both for and against traditional grading methods are presented in outline form. The arguments are taken from pertinent journal articles or books that are included in an annotated bibliography following the arguments. The second section of the report is a survey, in tabular form, of current grading and crediting practices in California junior colleges. In another section the results of studies concerning the rates of returns of educational expenditures are explained. Statements on credit-no-credit grading policy by 10 other California junior colleges are also included. In summary, 68 per cent of the junior colleges surveyed for this study are experimenting with some form of non-punitive grading practices. (RC)

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STUDY MATERIALS RELATING TO GRADES AND GRADING SYSTEMS

Compiled by

Lawrence G. Smith
Grossmont College

Summer Project, 1969

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UNIVERSITY OF CALIF.
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PART I: INTRODUCTION TO THE MATERIALS THAT FOLLOW

This report is intended to be a starting point for the Grossmont College Committee to Study the Grading Policy. It is composed of three major summary sections and fourteen appendix exhibits. Another appendix exhibit, a more careful study of non-punitive grading evidence and arguments prepared by the compiler, will be available to the Committee in October.

Part Two presents some key arguments for and against grading systems in general and for and against non-punitive grading systems. Readers are keyed to bibliographical entries following each argument or assertion. It is difficult to summarize this section, but I would say that the central task is to devise some kind of evaluative mechanism that provides requisite information to students and others while at the same time not becoming an end in itself. That is, at some point in time the student must be told whether he is or is not "doing it right." Ideally, the student will ultimately come not to depend very much on the external evaluation, whatever that is.

Part Three summarizes some characteristics and trends in different aspects of California junior college grading systems. The most striking trends that I observed were movements to a widespread use of credit/no-credit schemes, late-in-the-semester withdrawal-with-no-penalty dates, and a surprising number of schools using non-punitive grading almost school-wide.

Part Four presents a short history of the literature of professional economics, during the past fifteen years, on the rate of return to expenditures to education. The methods and rationale are explained, results of several studies are examined in detail, and policy implications are noted. Implicit rates of return to expenditures on junior college education are discussed.

PART TWO: ARGUMENTS ABOUT GRADING

This part is divided into three sections: (1) A list of arguments for and against traditional A - F letter grading, (2) An annotated bibliography of journal articles relative to this subject, and (3) An annotated bibliography of books that I read relative to this subject. There will no doubt occur to the Committee arguments I have omitted; the Committee will also bring to their task references I have overlooked. Hopefully, however, the following materials will provide a beginning look at the key issues.

2-A Some Issues and Evidence

In this section I list the main arguments for and against A - F grading that I uncovered or occurred to me. Rather than elaborate each one I have chosen to state it in as succinct form as possible and then key the reader to any bibliographical evidence or further arguments on the issue in question. In parts 2-B and 2-C the numbers following the statements are not necessarily in support of the statement; the articles cited merely spoke to this point.

Since any annotated bibliography is permeated with a reviewer's own biases, I have tried to separate out the most blatant of these and indicate them after an introductory set of initials: LGS. These comments, where applicable, follow the article in question.

(a) Arguments for grading systems and A - F grading.

1. Grades provide needed information about student quality to: students, graduate schools, parents, and employers.

   Readings: 14, 18, 34, 42, 43, 54, 57, 58.

2. Grades provide incentives to do better work, learn more.

   Readings: 1, 18, 30, 43, 54, 57, 58.

3. Grades provide, in conjunction with some sort of dismissal criteria, a mechanism for opening up slots for potentially more qualified students.

   Readings: 10, 54, 57, 58.

4. Failure occurs in the non-academic world; to create a failure-less academia would provide students with a false image of the "real world."

   Readings: 39.

5. The world is a competitive place; to remove competition in school would be dishonest. Further, competition among students for grades increases the amount learned.

   Readings: 35.

6. There are really many dimensions to grades: competence, improvement, potential, drive, etc. One grade cannot summarize them all. Therefore, we need a multi-dimensional grading system.

   Readings: 14, 26, 30, 32, 33, 54, 58.

7. Some students need the fear of a low grade to induce them to more work. After all, not every student thirsts for knowledge.

   Readings: 52.

(b) Arguments against grading systems and A - F grading.

1. Information that is provided is not terribly valuable: grades are inconsistent within teachers, across teachers, across departments, across schools. Grades are not correlated highly with later performance.

   Readings: 1, 11, 15, 20, 25, 34, 38, 42, 43, 53, 54, 56, 57, 58, Part Four this study.

2. Grades provide little incentive to work harder; they only penalize the failures.

   Readings: 1, 2, 8, 16, 37, 39, Appendix Exhibits A and B.

3. Grades provide students with extrinsic motivation and not intrinsic, "learning-for-learning's-sake," motivation.

   Readings: 3, 16, 24, 28, 43.

4. Grades provide incentive to beat the grading system itself and not to learn more efficiently.

   Readings: 16, 17, 24, 27, 36, 38, 43, 57, 58.

5. An "F" grade is a double penalty: it not only grants no credit, it must be "made up" in other courses. It is a penalty for learning something, however little.

   Readings: Appendix Exhibits A and B.

6. There are really many dimensions to grades: competence, improvement, potential, drive, etc. One grade cannot summarize them all. Therefore, we should have none.

   Readings: 23, 32, 33.

7. Elimination of the fear of an "F" grade as a penalty makes more open, frank, honest relations between students and teachers more possible.

   Readings: 30, 55.

8. A - F grading systems make instructors critics instead of helpers.

   Readings: 6, 31.

9. A - F grading systems discourage experimentation outside of one's field of special interest.

   Readings: 19, 49, 52, 55, 56.

2-B Journal Article Bibliography

(Compiler's comments and reactions are indicated by "LGS.")

1. Aikins, H. H. "It's Time We Change Our Grading System" Ohio Schools February, 1968.

   "Grading Systems are psychologically unsound, illogical, and inconsistent." Author lists what he considers as false assumptions underlying existing grading schemes: (1) That there is a consistent value or level of achievement implied in the letters. (2) That grades are objective, not subjective. (3) That grades motivate pupils to better achievement.

2. Alexander, E. D. "Marking System and Poor Achievement" Teachers College Journal (Indiana State College at Terre Haute), December, 1964.

   A review of the literature on factors that influence student achievement. The author reports some evidence (Martine, 1953, see below) that, under pressure of failure, people tend to get so involved in anxiety over their feelings about themselves that their efficiency suffers. The key concept is the student's self-perception. "Low marks function more as a threat of failure than as a motivation for achievement...Even students with skills and ability tend to continue to fail after experiencing failure...Any system that substitutes extrinsic incentive for intrinsic motivation creates conditions for conformity, manipulation, and control."

   LGS: A well-written, non-hortative article. The author's bibliography is presented below:

   Alexander, Eugene D., "The Relationship Between Self-Concept, Self-Acceptance and School Marks" Dist. Abs. 1963, 23:3229.

Baer, Clyde, "A Comparison of the School Progress and Personal Adjustment of Underage and Overage Students of Comparable Intelligence During Eleven Years of School." Newsletter, Division of Sch. Psychologists, A.P.A., Vol. 10 #2 Winter 1955-6.

Bond, Jesse A., "An Analysis of Factors Adversely Affecting Scholarship of H. S. Pupils." J. of Ed. Res. 46:1-15, Sept. 1952.

Diller, Leonard, "Conscious and Unconscious Self-attitudes After Success and Failure." J. of Per. Sept. '54, 23:12.

Kurtz, John J., Esther J. Swenson, "Factors Related to Over-achievement and Under-achievement in School." Sch. Rev. 59:472-80, Nov. 1951.

Malpass, Leslie F., "Some Relationships Between Student's Perception of School and Achievement." J. Ed. Psy. 44:475-82, D1953.

Martine, John George, "Relationship Between the Self-Concept and Differences in the Strength and Generality of Achievement Motivation." Dist. Abs., 1953, 13:877.

McMillan, R. T., "School Acceleration and Retardation Among Village Children in So. Oklahoma."

Osler, Sonia F., "Intellectual Performance as a Function of 2 Types of Psychological Stress." J. Exp. Psy. 1954-115.

Smith, George Joseph, "Influence of Failure, Expressed Hostility, and Stimulus Characteristics on Verbal Learning and Recognition." Disser. Abs. 1952-12-600.

Spivak, Monroe L., "Effectiveness of Departmental and Self-Contained Seventh and Eighth Grade Classrooms." Sch. Rev. 64:391-6, D'56.

Stevens, Peter H., "An Investigation of the Relationship Between Certain Aspects of Self-concept Behavior and Students' Academic Achievement." Dissert. Abs. 1956, 16:2531-2.

Tallent, Norman, "Behavioral Control and Intellectual Achievement of Secondary School Boys." J. of Ed. Psy. 47:4901503, D'56.

Thorne, Robert Bernard, "The Effects of Experimentally Induced Failure on Self-evaluations." Dissert. Abs. 1954, 14:1817.

Van Holt, Jr., Henry William, "A Study of Personality Processes Under Neutral, Failure and Success Conditions." Dissert. Abs. 1955, 15:1660.

3. Allen, P. M. "Student Evaluation Dilemma" Today's Education
   February, 1969

   Author points to differences in external causation and internal causation theories in psychology and how they apply to education. For learning self-evaluation, the student needs some objective data of his own learning. "If these data are made available to each individual in a nonthreatening manner, he can compare his action with his intent and his results with his objectives." He points out that all measurement of a system involves some disturbance of the system itself. He concludes with the observation that we must build an evaluation program that will utilize both theories and must provide appropriate data for self-evaluation by the student.

4. Bloom, G. "There Should Be No F's" Business Education World
   March, 1966

   Intent of title is not a change in the grading system but better teaching such that no teacher ever need to record an "F." Author suggests that teachers should not hold everybody to the same standard. Also, students must know why he received a failing grade. "It is a matter of channeling the student into the right area."

5. Brinley, E. and R. Bridewell. "Another View On 'College Grading'"
   The Texas Outlook January, 1967

   In a reply to the Olga Paul article, (see reading #41) the authors accuse her of complaining without adequate, broad-based evidence. "The degree of rudeness of awakening (of the student) is in direct (sic) proportion to the degree of preparedness." Students must bring "personal responsibility" to class. They doubt the value of faculty evaluation by administrators.

6. Burke, Ronald J. "Student Reactions to Course Grades" Journal of Experimental Education Summer, 1968

   Author surveyed 38 undergraduates at the University of Minnesota. He asked: "Do you think that grading helps or interferes with learning?" Number of students answering each way were: Helps: 3, Undecided: 10, Interferes: 25. Students who said "Helps" said: "Grades were powerful motivating factors for students who lacked drive." Students who said "Interferes" said: "A - F grading systems make instructors critics instead of helpers; the necessity of giving grades affects teaching in undesirable ways: instructor must orient course towards easily testable material, toward objective exams, toward insignificant details." A list of comments by answer category follows:

   Section A: Why Grading Helps Learning

   1. Provides discipline to keep student studying. (1)
   2. Provides a goal to strive toward. (1)

3. Forces the student to be interested and to study in courses he would ordinarily find dull. (1)

Section B: Why Grading Interferes With Learning

1. Extreme importance attached to the "good grade" results in grades, rather than knowledge or learning, becoming the prime interest of the student. (4)
2. Grade is not the real value of a course. The real value lies in use or application later in life. (2)
3. Emphasis on grades makes one take courses he can get good grades in instead of courses he is interested in and would like to take. (1)
4. Handicaps teacher. Teaches things he can measure. The teacher no longer is a "helper." (1)
5. Frustration when bad grades are received. Pressure and anxiety over grades makes learning unpleasant or even impossible. (3)
6. Students attempt to learn only what they feel may be on the test. Attempts to outguess the teacher. (5)
7. Makes students afraid to make mistakes, to appear stupid, to displease the instructor. (5)
8. Drives some students to dishonesty to stay in school. (1)
9. Forces people to go to class and encourages memorizing and cramming for tests followed by eventual forgetting. (3)

Section C: Undecided Whether Grading Helps or Interferes With Learning

1. This depends on a multitude of individual factors. (5)
2. This depends on the nature of the course. In an objective course (Mathematics) grades would help. In a subjective course (Interpersonal or Human Relations) grades would interfere. (1)
3. Too many variables are involved for a simple "help" or "interfere" answer. (1)
4. Both helps and interferes. Potential motivational benefits are lost because of extreme emphasis on good grades. (1)
5. Both helps and interferes. Grades (if can be made accurate and valid) can be helpful as a measure of relative standings among peers but unfortunately are usually harmful because they encourage taking easy courses in an attempt to raise the GPA. (1)
6. Both helps and interferes. Helps by forcing the student to pick up bits of information while cramming during the final week; but often results in working for grades rather than knowledge or learning. (1)

*Numbers in parentheses refer to the number of students offering each reason.

7. Cady, J. W. "How Important Are College Grades?" Journal of Higher Education November, 1966

This is a non-analytical summary of three studies of grade distributions across colleges. First he looks at (a) grade distributions in all Arkansas colleges, and (b) all Southern Baptist colleges and universities. For both (a) and (b), he finds that 47.5% of grades were "A" or "B." For (c) 168 schools in the North Central Association of Colleges and Secondary Schools, 50.5% of grades were "A" or "B." Author suggests that grades were "too high."

LGS: This conclusion is unsound. If ability levels differ across the 168 schools, all that can be concluded is that standards differ from school to school.

8. Chadwick, R. E., et al. "The Report Card in Non-Graded Schools" National Elementary Principal May, 1966

The authors question the notion whether the threat of a failing mark ever really spurred any elementary child to do better work. They described an extremely detailed reporting mechanism for reading skills, language arts, science, and social studies. They conclude that evaluation must be lengthy and force the teacher to view the child first and foremost in terms of ability. "The evaluation must also present to the child a realistic and acceptable picture of himself, a picture that gradually leads him to a realization of the person he is and may become. His strengths and his weaknesses should be made clear. At the same time, he must see himself as a worthwhile member of society with whom he can live happily and confortably. Unless we can do this for each child, all else we attempt to do is largely a waste of time."

9. Collins, Charles C. "Point of View on Grading Standards" Junior College Journal April, 1965

Author suggests that a high attrition rate in a course is not sufficient evidence that a course is a high standard course. He follows with a list of teacher characteristics that he thinks make up good standards in a course. Among them are: broad general education, use of relevant examples, desire to get to the heart of the problem, long run significance of the material, the relationship of the material to other material in the course.

10. Collins, Charles C. "Grading in the Community College" Junior College Journal December, 1965

"Education is for manhood, not for manpower. Junior colleges should disabuse themselves of any notion that they are a Gargantuan sieve." Proposes that junior colleges introduce a "P" or "E" grade which would be below a "D" but above an "F." It would mean that a student profited from exposure to a course but was not substantially high enough to warrant certification to the next highest level.

11. Delgalvis, N. "Suggesting a Different Grading System" Pennsylvania School Journal January, 1965

Author argues that percentage grades require too many fine decisions by teachers. Proposes a number system (5 = excellent, 4 = good, 3 = satisfactory, 2 = passing, 1 = utter failure) that, he asserts, would make consistency across teachers higher.

12. DePue, P. "On a Uniform Standard For Marking" Journal of Experimental Education Spring, 1965

Author presents a method for uniformly standardizing objective short quizzes for guessing. If x = number of questions and n = number of choices per question, let

$$x - \frac{x}{n} = 10.$$

Solve for various values of n to reveal appropriate number of questions to be asked. He also presents some answer forms that instantly correct for guessing by implicitly subtracting out the questions in a typical student's "Probable Area of Ignorance."

LGS: Still the problem remains: if you subtract out right answers that were really known, don't you penalize the best students?

13. DePue, P. "Great Fault in School Marks" Journal of Secondary Education May, 1967

Author suggests that marking by straight percentages was widely in use in the early years of the 20th century. Two forces upset this: the rise of objective grading with its attendant guesswork, and the idea of an arbitrary hurdle; e.g., 70. He suggests that tests must be adjusted for equal guessability in order for grades to be comparable. If the midscore of an exam is 50 and 70 is passing, we fail far too many people. Percentile grading is, according to him, not good because it ignores a proper absolute standard. He asserts that all tests should have a midscore of 50. This will allow the teacher to challenge the top people, which is impossible if 70 is passing and the midscore is 80.

14. Elbow, Peter H. "More Accurate Evaluation of Student Performance" Journal of Higher Education March, 1969

"The only real question is what kind of evaluation to have." There are two purposes: (1) To provide the audience with an accurate evaluation of the students' performance. (2) To help the student to the condition where he can evaluate his own performance accurately. To answer #1, he says that we must come to grips with the question, What is performance? He lists various categories and dimensions of student performance and argues for multi-dimensional grading to measure each of these. Each faculty member need not check every characteristic, but just that which he knows. "Less Grading is only valid if it really signifies the gradual transfer of effective evaluation from the teacher to the student himself."

LGS: Great article: easy style, but lots of content.

15. Flinker, I. "How Do We Rate?" Clearing House December, 1967

Author points out that ratings (grades) are too often dependent on (1) caliber of the class, (2) technical competence of the teacher, (3) standards of the particular teacher, (4) appearance and personality of the student, and (5) the student's effort and deportment. He also suggests that children's sensitivity to grades is often overlooked by teachers. Also he says that "grades should come as no surprise to students." His school (George Gershwin Junior High School) has tried to standardize across departments the weights for evaluative techniques, i.e., all departments will give equal weight to quizzes, homework, etc. Since the program is newly under way he was able to present no evidence as to its "success."

16. Gaier, Eugene L. "The Grade Society" National Elementary Principal May, 1966

The author reviews most of the existing literature to this date on the psychological aspects of grading. As such, it is an excellent review of this type of literature. He says: "Students seek a grade as an end in itself, not for what it represents in a given class." He continues with a discussion of several psychological paramenters underlying the grading process. Anxiety, he suggests, is troublesome because "fear of failure coupled with little insight as to how to change his behavior may make school a most unpleasant experience." He poses two basic questions: (1) What purposes do grades actually serve for the teacher and the student and others? (2) Do grades actually evaluate attainment and/or promote learning?

17. Garth Warner D. "Marks, How Much Do They Mean?" PTA Magazine April, 1969

Author lists the "traditional" arguments against grades, the most important being that grades begin to dominate the teaching process instead of being just an aid. He proposes systematic parent-teacher conferences as an evaluation supplement.

18. Goldsmith, N. W. "Testing and Grading; An Essential and Integral Part of the Educative Process" New York State Education December, 1967

Author points out that grades play a two-fold role: Administratively, as a basis for promotion of students; for granting credit; granting certificates, diplomas, and degrees; for awarding scholarships and honors; for evaluating; and recommending students for employment. Educationally, grades are useful as an indication of mastery and as a potential incentive. Remainder of article is a summary of his views on appropriate testing procedures.

19. Haskell, John M. "Pass-Fail? A System Worth Trying" Clearing House November, 1967

The history department at Longmeadow (Massachusetts) High School introduced Pass-Fail into a senior level Asian Civilization course. Later the faculty decided to experiment with Pass-Fail on a broad school-wide scale. He suggests that Pass-Fail is "an attempt to help the student free himself from the standard of an arbitrarily-fixed grade and, hopefully, substitute a kind of self-motivation that will trigger him into an attainment level that he might not reach under the pressure imposed by a letter grade."

The program had been just introduced; there was no measure of success or failure yet. He suggests that the faculty was worried about "controlling internally to prevent dilettantism or dabbling, rather than serious study."

LGS: "Dabbling" may, in fact, be one of the main purposes of Pass-Fail system.

20. Haueisen, M. "Why Businessmen Don't Ask About Grades" Balance Sheet February, 1965

A survey of business teachers showed a lack of consistent standards. In schools where standards existed, they differed across schools. Concludes that it is "time to standardize our grading so that businessmen, students, and teachers have a reliable source of academic information."

21. Hausdorff, H. "Effect of Grading Practices on the Marks of Gifted Sixth Grade Children" Journal of Educational Research December, 1965

This article is an attempt to evaluate differences in marking standards for gifted children across schools. It has little relevance for college grading practices.

22. Hinely, R. T. "Equal Chance, A Fantasy" Phi Delta Kappan June, 1967

A satirical article in which the author presents a scheme for handicapping better students to give poorer students a more equal chance.

LGS: Cleverly written, but society still needs to know, in actuality: "Who is the best surgeon?"

23. Holzman, S. "Grading by Teachers Called Harmful" Senior Scholastic November 30, 1967

(A news-review article) Dr. Paul R. Lohnes proposes a computer-based evaluation mechanism that would perform interpretive analysis and report each student's personality traits, including his abilities in academic areas. "We need a system that makes it impossible to type students."

LGS: (?)

24. Johnson, Icie F. "The Injustice of Grades" School and Community October, 1967

Author indicates that students are not encouraged to think for themselves--they are only encouraged to memorize. Final examinations just detract from further inquiry. "Our system of education with its grading habits develops a patterned mind, not an individual, logical one." Degrees won't give you "mind power." "When you have to work for grades, knowledge becomes a secondary goal, except for immediate use." He proposes that a course project be adequate proof of competence, rather than grades as such.

LGS: Author suggests no way to summarize the value of the project itself.

25. Kallsen, T. J. "Grades: Judgment or Lottery?" Improving College and University Teaching Summer, 1967

The author is concerned with the inconsistency of grades that might be assigned a single theme by a group of graders. He advocates that we should "return to numbers as devices to standardize grading in freshman themes." He presents a very complicated scheme that incorporates the "ideal grade" to be the mean grade that would be assigned by a group of competent graders. The scheme itself would be a source of training experience for the graders themselves.

26. Kingston, Albert J., and James A. Wash. "Research on Reporting Systems" National Elementary Principal May, 1966

An excellent survey of the literature on elementary school grade reporting. They report that multi-dimensional grading (grading not only for competence but for effort, improvement, etc.) is increasing. They point out that marking systems may be viewed as a system of communication. They point out that marks are only one means of re-inforcement; there is a lack of research into their effect.

27. Lange, Phil C. "Taking the Stress Off Grades" PTA Magazine October, 1967

Even where faculties consciously design a curriculum to emphasize main concepts, the tests usually do not require much, if any, knowledge of these. The tests sample equally from core material and silly details. Grading is poor and irrelevant if it fails to evaluate the learner's true progress. "The main business of school is not to grade students but to make learning rewarding for them."

28. Link, Frances R. "To Grade or Not to Grade" PTA Magazine November, 1967

Author points out that the current grading system makes the child dependent on his teacher and parents to do the evaluating for him. Some questions about any evaluation system are: "Does the evaluation system deliver the feedback, the information that is needed? Does it deliver the information when it is needed? And to the persons who need it?" Author suggests five criteria for an evaluation system: (1) Evaluation must facilitate self-evaluation. (2) Evaluation must encompass every objective valued by the school. (3) Evaluation must facilitate learning and teaching. (4) Evaluation must provide continuous feedback into the larger questions of curriculum development and policy. (5) Evaluation must produce appropriate records.

29. Mandel, B. "Ceilings and Floors: marking standards." High Points (of the New York City High School System) November, 1964

The author presents arguments for and against grade ceilings in remedial high school classes and grade floors in high school honors classes. This article seems to have little relevance to a college program because students are grouped, in principle, by ability by classes.

30. Mannelo, G. "College Teaching Without Grades" Journal of Higher Education June, 1964

The purpose of this study at Hofstra University was to study the effect of a non-grading evaluation system at an institution where the rest of the school still maintained the traditional grading mechanism. Author presents results of a survey of students. He finds less cheating, less tension in connection with class tests, a changed conception of tests as an educational tool, sustained and maintained quality and quantity of academic performance, and better provision for indirect needs and interests. Author indicates that he thinks that instructors should submit an anecdotal record of students' performance.

31. Mannelo, G. "Can Student and Teacher Agree on Grades?" Improving College and University Teaching Winter, 1967

This is a report of an experiment in which two Hofstra University classes tried to find out if their own self-evaluations equaled those of their instructors. By the end of the term, 30 out of 48 students (62.5%) were in complete agreement. Disagreements were minor, e.g., B vs. B-. The correlation between self-grades and instructor grades at midterm was .71, and at endterm increased to .89. Only 6% of the students disagreed at endterm by two grade levels, where a grade level includes a plus or minus grade.

LGS: Good article.

32. Marshall, J. C. "Evaluation: Does it Mean Anything?" The Clearing House May, 1968

Author asks: "If grades are to measure quality, why contaminate them with extraneous ingredients which destroy their original intent?" He argues forcefully that grades should measure only competence in the subject matter of the course. He argues against using grades as a measure of improvement with an analogy of grading eggs on this (improvement) basis: grade A eggs might have improved more over the last year than grade C eggs, yet grade C eggs might be still absolutely better in quality. He argues that dimensions of a student other than competence should be reported separately.

33. Marshall, M. S. "Triangular Grading " College and University Winter, 1968

Author points out that teachers see grades as serving at least three different functions: rewards or punishments, indices of quality of performance, and methods of discovering talent. The basic problem, as he sees it, is that just one grade in any particular course is multi-dimensional. "When a teacher...puts down a "B" those who want to know whether the student is a slaving dullard or a smart loafer are left with nothing." He proposes assigning three grades for each student for each course. The first would be the teacher's evaluation of the student's application and diligence; the second would signify only his performance; the third would be the teachers' evaluation of the students' intellectual capacity for the material of this course.

Author also points out that some teachers overtly use grades as a teaching aid; e.g., rewarding an over-achiever and prodding him to even better things and penalizing an under-achiever in order to prod him into greater effort.

34. Marshall, M. S. "Measure of Accomplishment" School and Society January, 1969

Author suggests that degrees and diplomas are false measures of accomplishment because they depend on arbitrary time intervals like four years, three years, etc. Instead, schools should issue certificates of completion at the end of each year. These annual certificates would thus stress the continuity of education. Diplomas and degrees could still be given but would not be the only awards. Author concludes with the observation that "difficulties of measuring accomplishment do not preclude its value."

35. Maxson, W. B. "Grading, A Serious Matter" National Education Association Journal (now Today's Education) October, 1964

This is part of a section addressed to new teachers. Author finds that "A point system in which students compete with each other and not the idea of perfection, works best." He finds that competition produces far more motivation than he can directly through exhortation of students.

LGS: Article is too chatty, introspective, and full of casual empiricism.

36. McGuire, Brian Patrick "The Grading Game" Today's Education March, 1969

The author, who had the highest average in the College of Letters and Science at UC Berkeley in Spring, 1968, suggests that, in his experience (high school and undergraduate work) students work more for grades than for knowledge. "The present A - F letter grade system detracts from the quality of learning more than it contributes."

37. Melby, E. O. "Let's Abolish the Marking System" Nation's Schools May, 1966

The main feature of this overly hortative article is the assertion that grades should be abandoned at all levels of education. "It (the grading system) leads us to measure the outcomes of our educational programs in terms of what people know, when we ought to be measuring them in terms of what people are and are in the process of becoming." (LGS: If evaluations of achievement are subjective, evaluations on this basis would require God-like insight into every student!) Author continues by suggesting that the grading system is destructive: the deprived child gets no special treatment and nine "F's" in nine years produces a dropout. A low grade may merely signify bad teaching. "As for standards, we should evaluate each pupil in terms of his capacity and growth, not in comparison with others, who are very different." He concludes with an argument for detailed written reports on students.

38. Milton, Ohmer. "What It Is...I Measure I Do Not Know" Educational Record Spring, 1968

Author suggests that fostering of learning (n.b., not grade-getting) is (or should be!) the main function of a college. He cites research that suggests that cheating increases when grading proceeds. He cites Hewitt (see below) that hint that the pass-fail options have not seemed to increase learning. Further, he cites results that indicate a low correlation between grades and later performance.

Reference: Hewitt, Raymond G. "Status of Pass-Fail Options at 22 Colleges and Universities" University of Massachusetts, Office of Institutional Studies.

39. Nelson, G. E. "Let's Do Away With F's" Minnesota Journal of Education March, 1968

Nelson suggests that the practice of "social promotion" and space and scheduling difficulties make "F" grades largely meaningless in elementary, junior high, and high schools. Preparation for college is not the only goal of schooling. The required degree of mastery of a subject or skill varies with the use to which it will be put. "Failure...is the ratio between expectation and implementation." An "F" grade is not a prod to greater scholarship, but many times the last straw. He counters the argument that "a man will experience failure in life, so he should become conditioned to it in childhood." He says not so. "A better view is that a backlog of success is the best preparation for failure." He concludes by suggesting that the "F" simply does not tell the parent or child enough.

LGS: Surely a background of successes is desirable, but they must be genuine successes.

40. O'Banion, Terry. "Rules and Regulations: Philosophy and Practice" Junior College Journal April, 1969

Author discusses the source and substance of academic rules in the junior college. He points to difficulties of the A-F grading system, among them the lack of consistency of grading across instructors, departments, and schools. He describes an A, B, C, I grading system in use at the College of the Mainland at Texas City, Maryland and lists the criteria they used in developing this evaluation system.

41. Paul, Olga. "Is College Grading Unfair?" The Texas Outlook November, 1966

A high school teacher, the author is concerned with the inequities of blanket grades, grade ceilings, a slavish adherence to the normal distribution, and the high rate of "F" grades. She proposes that there be in all colleges, evaluation of instructors by department heads, submission of tests to superiors, mandatory use of essay questions, complete elimination of multiple choice exams. Administration should have periodic chats with faculty. All college teachers should have to teach in the public schools before moving to the college level.

42. Perry, L. B. "College Grading: a case study and its aftermath" Educational Record Winter, 1968

In 1947-48, Whitman College adopted a new grading policy. Changes that they made were: eliminate "D's," make no grade point evaluations, and eliminate grade point average requirements. A point scale, not clearly explained by the author, was retained. The faculty in effect re-instated letter grades by modifying the "P" grades to include "H" (honors) and "HH" (high honors). These translations within the college were not perceived by outsiders, especially graduate schools. Finally this system was phased out in favor of the traditional A - F system because (1) Students complained that "P" grades accompanied by point totals of 70 - 74 often were converted to "D's" elsewhere. (2) Majority of the faculty didn't want to abandon both points and letters. (3) Students complained of fewer "H," "HH" grades being given than "B's" and "A's" formerly were. President Perry said that their main problem was that they were the only ones who made the change.

43. Raimi, Ralph A. "Examinations and Grades in College" AAUP Bulletin September, 1967

This carefully written article presents a defense of a grading system, a critique of the existing system, and the author's proposals for modifying the present system so as to preserve the valuable functions of a grading scheme and to eliminate the vices. In defense of a grading system he points to three reasons, which divide by audience. The first, the public, contains graduate schools, employers, and parents. Graduate education is expensive and ought to be limited to the best prospects; if a grading system can tell who is likely to be best, so much the better. Employers would like to know, as a first approximation, what kinds of courses a student took and how he did. Parents would like to know: Is he performing as well as other students in his class? Does he follow an optimally efficient course of study? Is he wasting my money? Secondly, the student needs some feedback as to how well he is doing. "If the university has as its purpose the erosion of ignorance, it has no business fostering ignorance of how well this is being accomplished." Thirdly, the university itself needs some mechanism to find out how students are doing. If all classes were very small there might possibly be more elaborate evaluative mechanisms. In sum, these three classes want grades to (a) serve as a certificate of accomplishment and (b) as a disciplinary device or incentive.

"The most telling criticism of all grading systems is that the incentive and discipline they foster are incentives to beat the grading system itself (rather than towards scholarship), and discipline in the direction of safe conformity (rather than in the habits of learning). The current grading system fosters learning small bits of knowledge without ever seeing the forest. Students learn only for the exam. Author proposes doing away with "courses" as such and requiring comprehensive exams of each student at the end of each academic period, possibly a year. It is these exams that will be the main evaluative device and they will reflect what the student knows at the end of his reading period.

LGS: A top rate article, impossible to summarize adequately.

44. School and Society "Grading: Haverford's New Policy" October 14, 1967

The traditional numerical grading system will be eliminated for freshmen and sophomores. Transcripts will show only courses taken, with a note if failed or withdrawn. Juniors and seniors will have grades recorded.

45. School and Society "Yale's New System: Abolishing Numerical Grading System" February 3, 1968

A news article that reports that Yale College of Yale University will no longer use their numerical grading system but will replace it with four designations: Honors, High Pass, Pass, and Fail. Prior to this time, in effect since 1943, grades were between 40 and 100, with 60 passing.

LGS: As was pointed out in many other articles, the Yale system is really an A - F substitute.

46. School and Society "Antioch Abolishes Grades" November 9, 1968

This is a news article that reports that as of July 1, 1968 Antioch College abolished all grades and replaced them with a system of Credit/No-Credit. Only statements of credit will be recorded on the transcript. Faculty will provide more detailed evaluation of students; (this was not spelled out).

47. Seawall, F. "Quality Grading System." College and University Fall, 1967

Author compares the current grading system to a machinist using a yardstick to measure thickness of a piece of sheet metal. Grades as a measure of success in the academic world are thus not fine tuned enough. He proposes that students in each class should be ranked from highest to lowest based on performance. These ranks, via some arithmetic operations, would be converted to a base of 100. A student's gradepoints earned would be calculated by weighting the adjusted rank in each course by credits. He realizes that this procedure would not allow for fundamental differences in ability between classes. He concludes by asserting that if grades across freshmen classes were standardized like this students will show preference for instructors who offer challenges and not just high grades.

LGS: Author fails to see many deficiencies with this system, one of which is that the best student in a 2 person class will get a lower grade (with the same absolute performance level) than if he had been in a class with (say) 15 others and was best.

48. Senior Scholastic "Who's On Top? Columbia Ends Ranking" April 21, 1967

A news article which is mainly a list of pro-draft and anti-draft arguments about class ranking. A-F grades will still be in effect at Columbia.

49. Sgan, Mathew R. "First Year of Pass-Fail at Brandeis University" Journal of Higher Education February, 1969

A pass-fail system went into effect in 1966-67. Each student was allowed four one-semester pass-fail courses. Author summarizes results of a very thorough set of surveys that he took both of faculty and student responses to the program. It is impossible to encapsulate here all of his results but two of them are: Of 1327 students that were pass-fail electors, 15% were from humanities, 63% from social sciences, 16% from sciences, and 6% from creative arts. Of 696 courses taken on a pass-fail basis by at least one student, creative arts (37%) and social science (33%) courses were most popular. Author's opinion was that grade reform has been "positive" but he was not overly ecstatic.

LGS: Very well organized, easy to read, and packed with information.

50. Simon, S. B. "Down With Grades" Today's Education April, 1969

To the author, the ugliest word is, "Whadjaget?" He suggests that the grading system is the most destructive, demeaning and pointless thing in education.

51. Sparks, Merla. "Alternative to the Traditional Grading System" English Journal October, 1967

Author points out that traditional grading methods for elementary and secondary "bottom" classes are, in her experience, disastrous. She found a workable method, over an entire academic year was as follows: Divide the year into four 9 week evaluation periods. At the end of the first period, send home a one paragraph evaluation to the parents. At the end of the second period, send home only a checklist with current deficiencies noted. After the third, send only a Satisfactory or Unsatisfactory grade and include a self-evaluation by the student. After the fourth and final period, send a one paragraph evaluation to the parents.

52. Stallings, W. M. "Pass-Fail Grading Option" School and Society March 16, 1968

"The very rationale for Pass-Fail might be examined." He presents a list of questions to be asked: (1) Do pass-fail students achieve at an equal level as A-F students? (2) Do pass-fail students show more favorable attitudes than A-F students? (3) Do pass-fail students attend class as often as A-F students? (4) Do pass-fail students spend as much time in preparation for class as A-F students? (5) Do pass-fail students audit more courses than A-F students? (6) What courses are most commonly elected as pass-fail? (7) Does the ratio of pass-fail students to A-F students vary over time? (8) Are pass-fail students different in grade point average, scholastic aptitude, and non-intellective characteristics? (9) Does the existence of pass-fail options lead to changes in majors?

He indicates that research shows that (1) Fear of low grades stimulates anxious students to a level of arousal such that learning effectiveness is lessened. (2) Non-anxious students are stimulated to a less complacent arousal level with a resulting increase in learning effectiveness. He concludes "thus, the removal of fear of low grades would lower motivation of non-anxious students." Pass-fail, it is hoped, will alleviate this somewhat, although it has not been shown yet that it has.

53. Terwilliger, James S. "Survey of Secondary School Marking Practices and Policies" Bulletin of the National Association of Secondary School Principals March, 1966

This is an extremely thorough study of teacher attitudes towards evaluation and testing mechanisms in 129 secondary schools, by 14 different departments. Too much to summarize, but in general they found a wide divergence across schools in the aims of their respective grading policies. Authors conclude that there is clearly a need to examine the foundations and assumptions of the entire grading structure.

54. Trow, William Clark. "Grades and Objectives in Higher Education" Educational Record Winter, 1968

This article explains both the functions and defects of the present grading system. In addition, he presents a method of testing which does not provide positive motivation for the student to learn 100% of the peripheral details of the course but does motivate the student to learn the basic core of the course. He suggests that marks serve four functions: selection, motivation, guidance, and instruction. For selection he thinks that Pass-Fail is useless, the present system only slightly better. But the grades are not consistent across teachers or departments. With respect to using grades as the basis for draft deferments, he says that "those who desire a lottery should be fairly well satisfied with the present system!" As for motivation, he says that grades create anxiety for the conscientious student, an acceptance of mediocrity for the easygoing student, and the invention of various schemes to get by for the rebellious student. As for instruction, he says that "... it is difficult to find any instructional function that is served by the traditional marking system." He continues, "...The basic weakness of the marking system is that it provides inadequate data. The functions are legitimate enough, so the problem turns out to be one of data collection."

55. Wolfe, D. "Are Grades Necessary?" Science September 20, 1968

This is an editorial with the "standard" arguments against traditional letter grades. Author suggests that Credit/No Credit will help alleviate the trouble.

56. Wilson, C. H. "Educational Innovation: Are Public Schools Going Overboard?" Nation's Schools November, 1967

Author suggests that the recent flood of innovations may be only a set of superficial Band-Aids for deeper troubles in the educational establishment. He says that the present grading system stifles bright students and defeats slow learners. "A" does not tell us how good is the class, the school, or the teacher. Exams and grades are measures of memory achievement rather than measures of teaching and learning. Teachers think that because they have awarded grades they have taught. He offers the proposal that the school system examine teachers(!) after the end of each semester or year by giving the students comprehensive examinations. Colleges should "invite students to learn," and then give a set of exams at the end of the year. With respect to especially elementary classes, he asks why not devise an organization system that will permit academic homogeneity and not chronological age homogeneity? He concludes with the observation that schools should be places of motivation for learning and not places of part-time incarceration and measurement of the young.

2-C Book Bibliography

57. Becker, Howard S., et al. Making the Grade New York: John Wiley and Sons, 1968

This book is a report of student and faculty attitudes towards grading at the University of Kansas in the early 1960's. The main thesis of their findings is that students worry too much about maximizing their grade point average and too little about maximizing learning. They call this the "GPA perspective." "Our analysis of the GPA perspective suggest that, as things stand, the chief obstacle to a more scholarly approach by students to their academic studies is their belief that they must give first priority to the pursuit of grades." With respect to the argument that schools must provide some sort of evaluation to graduate schools, prospective employers, etc., they are skeptical: "But there is no good reason to do it (provide evaluations) for any consumer, if a by-product is a substantial obstacle to a more intellectual or scholarly perspective among students."

LGS: Whatever your prior persuasion, read this. Most of the student comments are both pithy and humorous.

58. Marshall, Max S. Teaching Without Grades. Corvallis: Oregon State University Press, 1968

The author develops here more fully his thesis of numerous journal articles: The traditional grading system does not provide enough latitude to treat students as individuals. He offers his "flotation technique" of not assigning letter grades but rather having the teacher write a short, descriptive critique of each student's performance. He presents many examples of how the system would work.

LGS: The book contains some minor inconsistencies: at one point he complains about regular letter grades as not being really objective and at another he urges those who would use his descriptive method to be "completely objective." Any evaluation method is subjective. He also ignores the problem, especially prevalent in the junior colleges, of large class size. However, it is a good summary of many of the arguments against grades. Not much systematic evidence is cited.

PART THREE

WHAT OTHER SCHOOLS HAVE DONE AND ARE DOING WITH THEIR GRADING SYSTEMS

Some of the information contained in Appendix Exhibit 1-A (Junior Colleges, 1968-69 and 1969-70) will be summarized in the following question-and-answer format. I have not tried to summarize all possible information; if the Committee wants further data I will tabulate it for them as requested.

Q. (1): What is the "standard package" of grades given at most California junior colleges?

A. (1): A, B, C, D, F, Incomplete, W
Possibly WF, Credit/No Credit

Q. (2): What schools have officially or semi-officially moved to an ABCW ("non-punitive") grading format for 1969-1970?

A. (2): College of Alameda, Gavilan, Laney, College of Marin, Marymount at Palos Verdes, Merritt, Southwestern, and Yuba.

(N=8, which is 8% of the 94 California Junior Colleges)

Q. (3): What are "unusual" grades that junior colleges use and how are they used?

A. (3): See Table 3-1 below; consult Appendix Exhibit 1-A for school number key.

Table 3-1. "Unusual" Grades Assigned in California Junior Colleges, 1968-69 and 1969-70

School	Grade	How Used
5,78,79	P	Passed on Credit/No Credit
6	AE	Adult Education class
11,22,28,77,86,90,94	E	Incomplete
12	K,N	K: Credit; N: No Credit
13,32	WU	Unofficial withdrawal
14	"WF"	Unsatisfactory withdrawal, but not counted as units attempted.
21,30,81	FW	Unsatisfactory withdrawal
23,87	Pass	(No explanation)
29	"WV"	Equal to "WF" for school #14
31	Audit; ME	Audit: No explanation; Medical excuse
41,55	X	Withdrawal, no penalty
47	CRX	Credit by examination
55	ICR	Incomplete in CR/No CR courses
78	N	No units earned
80	UF	Excessive absenteeism
82	U	Unsatisfactory withdrawal
87	UW UWF UWP	Unauthorized withdrawal Unauthorized withdrawal failing Unauthorized withdrawal passing
88	S	Average work

Q. (4): What were the most common types of "Incomplete" policies for 1969-70?

A. (4): See Table 3-2 below.

Table 3-2. "Incomplete" Policies of California Junior Colleges, 1969-70

Policy	Number of Schools	Percentage
Must be made up sometime next semester	52	55
Must be made up next semester if residence	16	17
Must be made up within one year	6	6
Must be made up within three years	1	1
Not available	19	20
Totals	94	99%

Q. (5): What is the minimum number of schools that offered Credit/No Credit programs in 1968-69 and 1969-70?

A. (5): See Table 3-3 below.

Table 3-3. Junior Colleges Offering Credit/No Programs in 1968-69 and 1969-70

	1968-69		1969-70	
	Number	%	Number	%
Schools offering CR/No CR programs	24	26%	48	51
Schools not offering CR/No CR or NOT available	70	74%	46	49
Totals	94	100%	94	100 %

Q. (6): What is the minimum number of schools that offered Credit by Examination in 1968-69 and 1969-70?

A. (6): See Table 3-4 below.

Table 3-4. Junior Colleges Offering Credit by Examination in 1968-69 and 1969-70

	1968-69		1969-70	
	Number	%	Number	%
Schools offering Credit by Exam	34	36%	34*	36
Schools not offering Credit by Exam or NOT available	60	64%	60	64
Totals	94	100%	94	100%

*Note: Not the same schools as 68-69; some added but others were N/A, so the numbers are the same. More detailed data will be provided on request.

Q. (7): What was the last week of the semester that students could withdraw from a course without being subject to a penalty (e.g., WF) for 1969-70?

A. (7): See Table 3-5 below.

Table 3-5. No Penalty/Potential Penalty Cut-off Date for 1969-70

Week of Semester	Number	%
1 - 3	2	2
4 - 5	5	5
6	14	15
7 - 12	29	31
13 - 16	9	9
Not available	27	30
Schools using ABCW	8	8
Totals	94	100%

Note: I did not tabulate the 1968-69 distribution, but my impression was that there was a definite systematic move to later penaltyless withdrawal dates. (Will tabulate on request.)

Q. (8): What is the minimum number of schools that retained a WF (or equivalent) grade for 1968-69 and 1969-70?

A. (8): See Table 3-6 below.

Table 3-6. Schools Retaining WF Grade, 1968-69 and 1969-70

	1968-69		1969-70	
	Number	%	Number	%
Schools having a WF (or equivalent) grade	45	48	32	34
Schools not having a WF or not available	49	52	62	66
Totals	94	100%	94	100%

Note: *Although schools changing and those "Not Available" are not reported separately, there was a considerable increase in schools deleting WF grades.

Q. (9): Other than ABCW schools, what is the minimum number of schools that moved their "No Penalty" withdrawal date past the 12th week?

A. (9): 11 schools, or 12%. If we add 15 "Implied" ABCW schools, this percentage increases to 28%.

Q. (10): For schools that establish a date after which no withdrawals are possible (without a mandatory F or possible INC.), what is the distribution of these dates?

A. (10): See Table 3-7 below.

Table 3-7. Dates past which no withdrawals are permitted, 1969-70

Week of Semester	Number
7	1
⋮	⋮
11	4
12	5
13	2
14	3
15	6
16	2
Until final exam	6
N/A or no cut-off	65
Total	94

Q. (11): What is the "standard" policy on repeating a course?

A. (11): Only a D or F may be repeated; units are earnable only once; all units attempted and all points earned are computed in GPA.

Q. (12): What schools use the repeat grade exclusively and ignore the prior grade in computing a student's new GPA when a course is repeated?

A. (12): Schools 2, 17, 22, 28, 32, 40, 59, 70, 85, and 87.

(N=10 or 11% of 94)

Note: Again, some schools were N/A, so this is a minimum estimate.

Q. (13): What percentage of the faculty in each junior college is using or will use an ABC(D)W grading format?

A. (13): In July, each Dean of Instruction or College President was asked the following question:

"Approximately what percentage of your faculty would you guess is using an ABC (possibly an optional D) W grading system?"

Unless otherwise specified, all replies were interpreted as applying only to 1968-69, since the Dean could have little way of knowing 1969-70 numbers. These replies are summarized in Table 3-8 on the following page. The reader is urged to consult, however, the varied replies appearing in Appendix Exhibit 1-A to get a feel for the diversity of these answers.

Table 3-8. Faculty Using ABCW, 1968-69 and 1969-70

Percent of Faculty Using ABCW or ABCDW	Actual 1968-69			Predicted 1969-70			"Implied" 1969-70	
	School #	N	%	School #	N	%	N	%
0-5%	3,7,9,12,13,21,26,29,30, 36,43,44,45,47,50,51,53, 57,61,64,65,66,67,73,74, 76,78,81,83,84,87,89,90, 91	34	36	33,42,44,51,66,91	6	7%	36 (=34+2)	38
5-10	32,60,79	3	3				3	3
10-20								
20-30	24,88	2	2				2	2
30-40	56	1	1	55	1	1	2	2
40-50								
50-60	34	1	1				1	1
60-70								
70-80	52,85,86	3	3				3	3
80-90	40	1	1				1	1
90-100	14,16,19,35,39,49,58,62, 92,94	10	11	1,31,39,48,49,52,89,94	8	9	15 (=10+5)	16
N/A	All others	39	42	All others	79	84	All others=31	33
Totals		94			94		4	9

I received 63 direct (i.e., usable) replies to the question concerning percent of faculty using an ABCW system. Some deans gave me 1968-69 data, some gave me 1969-70 data ("X% will be using ABCW"), and some gave me both. These are summarized in the first two major sets of columns titled " ctual 68-69" and "Predicted 69-70." If we assume that no faculty will change his mind from 68-69 to 69-70 on this issue, the "Implied 69-70" is derived. This distribution gives all schools for 68-69 and 69-70 combined, allowance being made for double counting. (It is the "union" of the 68-69 and 69-70 sets by percentage bracket.)

Care should be taken in reading Table 3-8. In some instances it was reported that "100% of our faculty use an ABCDW system," but the allowable grades included an F. This is entirely possible, of course, but it is also possible that the question was misread. At the low, 0-5%, end some reported that "100% of our faculty use an ABCDF system"--again, a possible misreading.

PART IV: RATES OF RETURN TO EXPENDITURES ON EDUCATION

This section will review the efforts of the economics profession to provide some kind of estimates on the cost-effectiveness of expenditures on education.

Cost-benefit analysis in any area recognizes that the undertaking of some action or program requires, under normal circumstances, that some other action of program not be undertaken. In the words of academic economics, "resources are scarce relative to wants." Since some of the popular literature (Galbraith, Harrington, The New York Times) either overtly or implicitly denies the scarce resources assertion, it may be well to digress a moment and discuss its relevance.

Much of what we carry around in our heads as "truth" or "fact" rests on unsupported assertions. Fortunately, some of these assertions are capable of direct test: Has "the price level" increased or decreased? Do minimum wage laws cause unemployment? Has the rate of construction activity declined or increased?

Other assertions are not capable of such direct confrontation, but must be verified or rejected with other methods. One of these other methods is called, in mathematics, an indirect proof. An indirect proof suggests the validity of the statement "A is true" by considering the implications of the statement, "A is not true." If these implications are demonstrably false as matters of logic or are inconsistent with empirical evidence, then the statement "A is true" is accepted.

As an example, consider the assertion, "Resources are scarce relative to wants." Some of the popular literature tends to reject or ignore this. Yet its negative, "Resources are not scarce" is widely inconsistent with experience. To see this, suppose that the negative is true. In this case, no one would be unsatisfied in the society. The newspapers would be free of middle and upper income class complaints about taxes; they would be free of low income class complaints about poverty; they would be free of calls for the "setting of national priorities," especially in a moon landing year. There would be no complaints or calls for priorities because everyone could have all that he wanted by wishing for it or, alternatively, everyone was simply completely satisfied.

A casual glance at the daily newspapers suggests the complete falsity of the negative. We infer, therefore, that resources are scarce relative to wants.

The crucial question to society is, then, "Is education worth it?" That is, if we balance off the goods and services that could have been produced with the resources necessary to provide the educational services, are we willing to forego these other goods and services in order to provide schooling or, more accurately, more schooling?

The costs of education are both explicit and implicit. Explicit costs include teacher and administrative salaries, construction and maintenance costs, other public costs, and direct payments made by students that include tuition, books, fees and other schooling-related expenditures. Implicit costs include earnings that students could have been producing had they not been in school.

The benefits of education are both private and social, pecuniary and non-pecuniary. Private pecuniary benefits of "consuming" education accrue to students in the form of higher incomes than they would have produced. Non-pecuniary benefits accruing to students include the (hopefully positive) satisfactions from current school enrollment and the almost surely positive benefits from being able to enjoy a fuller life in the arts, homemaking, recreation, work, etc.

External or public benefits accrue to society at large from educational expenditures in the form of lower welfare costs, lower crime costs, lower unemployment costs, and the enriched atmosphere that results from having everyone's children being more literate.

Curiously enough, careful enumeration and measurement of these costs and benefits did not begin until the late 1950's. Spearheaded by Professor Theodore Schultz (Chicago), there has been a dramatic surge in research effort, especially in the 1960's. The most careful studies done to date are those by Schultz, Becker (Columbia), Hanoch (Hebrew University), Blang (London School of Economics), Carnoy (Chicago), and Bowman (Chicago).

Educational expenditures can be viewed as an investment in man. That is, a person who has "consumed" education will be a different person who, in later life, will be a more informed consumer, better producer of income, better able to enjoy life, etc. Education as an investment in man, then, serves to increase the stock of "human capital" in the society. (If this "human capital" view of schooling disturbs the reader, you may want to substitute some term like "resources" for "capital," although the underlying concept is the same.)

One very powerful way of deciding whether or not to undertake a particular investment project is to estimate the expected rate of return on the proposed project. A rate of return is similar to, for example, the interest rate paid to a savings depositor. If \$100 is deposited today and one year from today \$105 is available to the depositor, the rate of return has been 5%. If a bond purchaser must pay \$1,000 for an income stream of \$40 per year forever (similar to British consols), the rate of return is 4%.

For any given initial cost and the subsequent income stream produced, (regardless of time shape and dollar size) it is possible to estimate the implicit internal rate of return that this investment earned. Using data on personal earnings cross-classified by age, education, ability, and other variables, several researchers have, in fact, done this for education in the U.S. and for some other countries.

The most careful estimates of rates of return are those provided by Becker and Hanoch. In summarizing the Becker work I can do no better than to quote Schultz, writing in 1968:

> "Turning...to the rate of return as the central concept, the alternative investment opportunities are of course numerous, not only between human and material capital but within each of these two sets. Is there evidence that private educational choices are privately efficient; that is, do private rates of return on education tend (1) to be equal among educational options and (2), to be comparable to private rates of return on other private investments? The evidence implies inefficiencies. To illustrate, consider the available estimates on alternatives within education: In terms of equalizing the rates of return, elementary and secondary schooling appear to have priority.

TABLE I

ESTIMATES OF PRIVATE RATES OF RETURN, UNITED STATES

Year	High School Graduates: White Males after Personal Taxes (%)* (1)	College Graduates: White Males after Personal Taxes (%)* (2)	Corporate Manufacturing Firms after Profit Taxes but before Personal Taxes (%)** (3)	U.S. Private Domestic Economy: Implicit Rate of Return after Profit Taxes but before Personal Taxes (%)*** (4)
1939	16	14.5		...
1949	20	13.+		12.6
1956	25	12.4	7.0 (for period 1947-57)	14.4 (1955-56)
1958	28	14.8		12.3 (1957-58)
1959	Slightly higher than in 1958			9.7
1961	Slightly higher than in 1958			11.2 (1960-61)
1963-65	...	...		13.3

* From Becker (1964a), p. 128

** Also from Becker (1964a), in which he draws on a study by G. J. Stigler (see p. 115 and n.2).

*** From Jorgenson and Griliches (1967), p. 268.

> All of the estimates with which I am familiar show the highest private rates of return to elementary schooling. (A word of caution--estimates of foregone earnings are probably somewhat too high for college students in light of new evidence which shows an increasing proportion of college students employed part time while attending college; and, for students in their last two or three years of elementary school, there probably are some earnings foregone which have not been reckoned in the estimates of private rates of return.) We need to remind ourselves that there are still some children who are not completing

> the elementary grades; and what is more important is the underinvestment in the quality of elementary schooling, especially in many rural areas. While the private rate of return on the investment resources entering into high school education is not as high as that on elementary schooling, it nevertheless appears to be about twice as high as that indicated for private investment in completing college. In Table 1, the private rates of return to white males after personal taxes, in 1958, are 28 percent for high school graduates and 14.8 percent for college graduates. Thus, in allocating resources within education with a view to equalizing the rates of return, the implication is that elementary and secondary schooling appears to be subject to underinvestment relative to high education. Nevertheless, comparing columns (2) and (4) in Table 1, the private rates of return to white male college graduates after personal taxes, without any allowance for the private satisfactions that accrue to students,* are on a par with the private implicit rates of return to material capital before personal taxes on the income from this capital."
>
> * (LGS underscore)

Giora Hanoch has provided the most careful estimates of rates of return to various levels of schooling. His "master table" is reproduced below. Each entry is a decimal form rate of return that answers the following question: If a student, being presently at some level of schooling indicated by a column heading, were to attend school from that point until he reached a level given by a particular row heading, what rate of return would he earn? For example, suppose a White/North student were a high school graduate (12 years) and attended college for 1, 2, or 3 years only (13-15 total years), he would earn, on average, about 7% on this investment.

This figure, by the way, is most relevant for junior colleges. For both north and south it is slightly lower than for completing four full years of college. I personally think that this 7% figure is biased downward primarily because it is my guess that foregone earnings of junior college students are less than their four year college counterparts. If this is true, the "true" returns to junior college expenditures will be higher.

TABLE 3

ESTIMATES OF PRIVATE INTERNAL RATES OF RETURN AMONG SCHOOLING LEVELS, BY RACE AND REGION; ADJUSTED FOR VARIOUS FACTORS[a]

Higher Schooling Level in Each Comparison	Lower Schooling Level in Each Comparison						
	0-4	5-7	8	9-11	12	13-15	16
			Whites/North				
5-7	b						
8	b	.218					
9-11	.474	.185	.163				
12	.331	.175	.161	.160			
13-15	.196	.125	.111	.097	.071		
16	.170	.124	.115	.107	.096	.122	
17+	.144	.110	.103	.096	.087	.095	.070
			Whites/South				
5-7	b						
8	b	.144					
9-11	.662	.162	.182				
12	.441	.172	.186	.188			
13-15	.274	.139	.138	.127	.093		
16	.216	.131	.128	.120	.101	.110	
17+	.179	.118	.114	.107	.092	.091	.073
			Non-Whites/North				
5-7	b						
8	.06	.01					
9-11	.13	.03	.23				
12	.18	.06	.23	.22			
13-15	.07	.03	.07	.04	c		
16	(.07)	(.03)	(.07)	(.04)	d	(.08)	
17+	(.12)	(.09)	(.13)	(.12)	(.10)	(.16)	(.23)
			Non-Whites/South				
5-7	.89						
8	.27	.06					
9-11	.22	.06	.10				
12	.17	.08	.11	.12			
13-15	(.13)	(.08)	(.09)	(.09)	(.07)		
16	(.11)	(.07)	(.08)	(.08)	(.06)	(.07)	
17+	(.08)	(.06)	(.06)	(.06)	(.05)	(.06)	(.05)

[a] Source: Thesis, Table 6. Numbers in parentheses were based on too few observations to be reliable. [b] Rate was above 1 (extremely high in most cases).
[c] Negative rate (--.05). [d] Multiple solutions, with no rate between-- 0.1 and 1.0.

Hanoch analyzes his results as follows:

> "The more important biases inherent in the . . .rates of return are those associated with ability. There is probably a significant positive correlation between ability to earn income--a combination of natural and acquired ability traits--and the level of schooling achieved. This obviously leads to a positive bias in the differentials between schooling levels and in rates of return to schooling.
>
> "Nonpecuniary returns (positive or negative), which are not measured as earnings, are another source of serious bias. Some of the variables used to estimate the earning function may have partially accounted for such factors (e.g., type of residence), but only to a limited extent. The consumption aspect of the schooling activity itself is also a form of nonpecuniary element. The over-all effect of all the various forms of nonpecuniary elements on the rates of return is unknown and difficult to evaluate, especially because many of these elements are not measurable or even quantifiable (such as status, satisfaction from learning, etc.)
>
> "Additional modifications of the rates of return are required in principle to adjust for mortality, for expected secular growth in incomes, for improvements over time in productivity and in the quality of schooling, for cyclical variations in earnings, for expected changes in relative supply and demand of various skills, for the progressive taxation of earnings, and for differences in the cost of living. These modifications, applied to the cross-sectional results, would accord with the theory that individuals and groups base their expectations about earnings not on conditions at a point in time among different age and schooling groups, but rather on the economic experience of cohorts over their lifetime.
>
> "Finally, it should be emphasized that the rates of return estimated and analyzed here are strictly private rates of return. Extensive modifications are required if one wishes to derive from them social rates of return, which take into account the considerable external effects of schooling.
>
> "Keeping in mind the drawbacks and limitations of these rates of return (Table 3), one may first examine the rates within the groups of whites. Although their order of magnitude is lower than usually claimed, it is considerably higher than rates of interest in the market and somewhat higher than average rates of return generally estimated for nonhuman capital. The average rate for high school (relative to grade school or to high school dropouts: 12 against 8 or 9-11 years of school) is 16 percent for whites in the North and 19 percent in the South.
>
> "College dropouts (13-15 vs. 12 years) showed relatively low marginal rates, as would be expected--7 and 9 percent in the North and South, respectively. The completion of college (16 vs. 13-15 years) shows return rates of 12 and 11 percent, respectively,

although the average rate between college and high school (16 vs. 12) is only about 10 percent in both regions.

"The marginal rate of return to graduate school (dropouts and graduates, 17+ vs. 16 years) is surprisingly low: 7 percent in both regions. The assumption that direct costs equal student earnings may required more qualification in this case than at other levels, because many more students in graduate school get tuition scholarships and fellowships which are currently not reported as earnings. Nevertheless, it seems clear that the high earnings foregone by these students during school attendance reduce the attraction of graduate school as an economic investment, in spite of the large future returns.

"Returns to the very low levels of education (5-7 and 8 vs. 0-4) are extremely high, mainly because of the negligible magnitude of both direct and indirect school costs at these levels. In fact, all levels of schooling, including graduate school, seem to bear very high returns relative to the level of virtually no education (0-4 years, the first column in the table). However, adjustment for differential ability might reduce these rates considerably.

"In contrast, the last year of grade school bears significantly lower marginal returns than the fifth-to-seventh years, especially in the South. The marginal rates are 21.8 percent in the North, but only 14.4 in the South. The latter figure may reflect the fact that young boys dropping out of grade school before completion often stay home or are unemployed in most of the country, but go to work in the South, thus increasing the foregone earnings component of costs and reducing the estimated rates of return.

"Except for this last case, there seems to be a definite tendency for rates of return to whites to be higher in the South than in the North. This probably reflects the relative shortage of skills in the South. Another explanation may be found in the lower costs per school year in the South, as explained below. However, the difference in the rates among regions is negligible at the university level (especially 17+ vs. 16 years).

"The internal rates of return for nonwhites are generally low and relatively erratic, as was anticipated in view of the irregular nature of the estimated earnings profiles in these groups. Additional data and more extensive analysis might indicate whether these results merit any serious consideration [as being statistically reliable]."

One apparent contradiction between the literature of economics and that of education is over the relationship between grades and personal earnings. In every study that I know of in economics between the two there has always been discovered a mild, positive relationship between class rank and personal earning. In every study that I read in education they asserted that there was no relationship between grades and "subsequent success." I did not go to the original studies to reconcile this difference, so it's still a mystery to me.

Floren, Leasure, and Turner, of San Diego State, taking a demographic approach to the problem of external effects of education, find that " . . . when the educational level . . . is raised from a low pattern to that of the national pattern for school enrollment, the additional expenditures are not only self-financing, but ultimately generate annually additional tax revenue which is more than three times the additional cost to the taxpayers."

As Hanoch points out, rate of return guesstimates are loaded with both technical and conceptual difficulties. Nevertheless, they are the best allocative guides that we have in this area to date.

REFERENCES

1. Becker, Gary S. Human Capital. New York: Columbia Univ. Press, 1964.

2. Floren, R., J. W. Leasure, and M. S. Turner. Public Benefits Associated with Public Expenditures in Education. San Diego: Institute of Labor Economics, 1969.

3. Hanoch, Giora. "An Economic Analysis of Earnings and Schooling." Journal of Human Resources, Summer, 1967. (See also similar articles this issue for rates of return in England, India, and Mexico.)

4. Schultz, Theodore W. "Resources for Higher Education: An Economist's View." Journal of Political Economy, May/June, 1968.

APPENDIX EXHIBIT 2:
GROSSMONT COLLEGE GRADE REGULATIONS
(FROM CATALOG): 1969-70

GENERAL REGULATIONS

ATTENDANCE RULES AND REGULATIONS
Attendance Requirements

Experience demonstrates that absence and tardiness contribute to academic failure. Absence interferes with the instructional process; the legitimacy of the reason for absence in no way mitigates the loss incurred. The instructor of a course is in the best position to judge the effect of any absence on the progress of a student in that course; hence, it is the instructor's prerogative to report excessive absence and to recommend withdrawal of the student from the course when in his judgment such absence has seriously interfered with learning.

Absence due to illness or absence due to participation in a college sponsored activity certainly introduce the element of extenuating circumstances and presumably will be factors in instructor judgment. If the absence is due to illness, the student should verify his absence by following the procedure outlined below.

1. The student should indicate his own illness or medical appointment verbally to the instructor. This does not require a note from a physician or parent.

2. The instructor records this verification on his attendance roster.

3. It is the student's responsibility to report any illness at the next class meeting attended.

4. Absence due to accident or illness which exceeds one day may be reported by the student or his family by phoning the Counseling Center and information can be relayed to the instructor. One day's illness will not be reported.

The Office of the Dean of Student Activities will take the responsibility of notifying all instructors concerned of co-curricular activities which might conflict with class attendance.

Make-up work for absence of any kind must be completed to the satisfaction of the instructor. All instructors recognize the unavoidable nature of illness, and it is institutional policy to support and encourage student involvement in significant activities and experiences outside the classroom. Even so, no absence, whatever the reason, relieves the student of the responsibility of completing all work assigned.

Leaves of Absence

Leaves of absence may be granted for periods not to exceed five days if the student presents satisfactory reasons and secures advance approval from his instructors. Instructors will be asked to give make-up assignments for all work if the leave-of-absence petition is approved. Under no circumstances will leaves be granted at the end of the semester when finals would be missed or course requirements not fulfilled.

PHYSICAL EDUCATION REQUIREMENTS

Regular students are required by state law to be enrolled in a physical education activity during their first four semesters of college. Therefore, all students must include physical education if they are enrolled in more than 8 units of academic work. If medical reasons necessitate exclusion from physical education, a medical statement on the college form must be on file in the Office of Admissions and Records. Persons who, on the date of registration, are over 21 years of age are not required to take physical education, but are encouraged to do so.

EXAMINATIONS

Final Examinations

No student may be excused from final examinations. Instructors will not ordinarily give final examinations at any time other than that regularly scheduled.

Early Finals: If in the opinion of the instructor an extreme emergency justifies the giving of a final examination prior to the regularly scheduled date, the instructor shall notify the Office of Instruction in writing that an early examination is being given. This notification shall include the title of the course, the reason why the early examination is authorized and the name of the student.

Late Finals: In the event severe illness or other emergency prevents the student from taking a final examination during the regularly scheduled date the instructor must be notified at the time, and, as soon as possible, the student must make up the examination missed. In all cases the illness or emergency must be verified.

STUDY LISTS

At the end of the fifth week of each semester a study list is mailed to each student. This list will reflect official college records. Any discrepancy between the study list and the classes the student is attending should be corrected through a program change.

DEFICIENCY NOTICES

It is assumed at Grossmont College that students are aware of their academic progress in any course at any time; however, when in the instructor's opinion a student is deficient in a course, the instructor may require a conference with the student to discuss his progress. Notice that the student is doing deficient work may be conveyed by the instructor to the student either in writing or by oral communication. The College does not require official notification by the instructor when a student's work is unsatisfactory in a course.

CHANGES OF PROGRAM

Great care should be exercised by the student when he, with the help of his counselor, plans his semester's program. No program should be arranged on a trial basis.

If a change in program is unavoidable, a change of program form must be secured and required procedures completed before the change becomes official.

ADDING COURSES

Regular classes may be added to the student's program, subject to available class space, during the "add" period by following required procedures.

AUDITING COURSES

Grossmont College does not permit auditing of classes.

DROPPING COURSES

A student desiring to drop any course must initiate this request through the Office of Admissions and Records. A student may withdraw without being subject to penalty through the Friday preceding the start of the last four weeks of class. After the penalty-free period the instructor may record a "W" or an "F" depending upon the student's academic standing and circumstances known to the instructor.

WITHDRAWAL FROM COLLEGE

A petition for honorable withdrawal from the college may be secured from the Office of Admissions and Records. It is the responsi*bility of the student, day or evening, to secure the required signatures* to clear himself of all obligations and file the withdrawal form with the Office of Admissions and Records. When this has been accomplished, the student will be eligible for honorable withdrawal.

UNIT VALUE AND STUDENT LOAD

A conventional college unit of credit represents three hours of the student's time each week for one semester: one hour in scheduled classroom lecture or discussion and two hours in outside preparation. For laboratory, the college unit represents three hours of work in laboratory (or in comparable experience) under classroom supervision.

The usual unit load for a college student per semester is 15½ units. No student may enroll in more than 17½ units in a semester unless he has qualified for the Deans' List (3.0 GPA) the preceding semester. Exceptions must be cleared through the Office of the Dean of Guidance.

MINIMUM LOAD

The College does not specify a minimum load except when the student desires to meet certain requirements such as:

1. Certification to a Selective Service Board or to the Department of Health, Education and Welfare that the student is attending full time. Requirement: 12 or more units a semester, but a student should average 30 units a year.

2. The load requirement for Chapter 34 (Veterans), 1966 Federal Veteran Education Act, and for Chapter 35 (War Orphans) is:

	Semester	Summer
Full time	14 units	14 hours per week
Three-fourths time	10-13 units	10-13 hours per week
One-half time	7- 9 units	7- 9 hours per week

3. Full-time load to maintain status as an "F-1" visa (foreign) student. Requirement: 12½ or more units a semester.

4. Eligibility to participate in Mission Conference intercollegiate athletics. Requirements: 10½ or more units in courses for which NEW units of credit may be earned. Students should see Mission Conference and Grossmont College regulations for additional requirements.

5. Eligibility to participate in student government as an office holder or in intercollegiate activities other than athletics. Requirement: 12 or more units during the semester of participation. Students should consult student handbooks and faculty for additional requirements.

GRADING SYSTEM

Grades are earned in each course on a semester basis and are recorded on the student's permanent record. A photostat of this record becomes the transcript forwarded to colleges of transfer or other agencies. Grades should be interpreted as follows:

A	Excellent achievement showing initiative and originality.
B	Highly satisfactory achievement in all assigned work.
C	Average or adequate performance covering minimum essentials.
D	Inferior but passing work covering minimum essentials.
F	Failure to meet the minimum standards of the course.
INC.	Incomplete work for justifiable, approved reason. All obligations must be cleared the following semester. Failure to complete all obligations within one semester (Summer Session excluded) will result in a "W" or an "F" as determined by

the instructor. An incomplete grade ordinarily may be given only after the student has contacted his specific instructor. Incompletes will not be computed either as a grade or as units attempted.

W Withdrawal from course without penalty.

In line with recent legislation authorizing junior college districts to incorporate credit/no-credit evaluation into their grading policies, a faculty-student-administration committee is working on a procedure for implementing this concept. The procedure will include the opportunity for a student to enroll in a maximum of twelve units (outside the major) on a credit/no-credit basis. Such units earned may be counted in satisfaction of junior college general education and elective curriculum requirements, but will be disregarded in determining a student's grade point average for all purposes for which such a grade point average is required.

GRADE POINTS

Academic achievement is reported in terms of grade point average. This is derived from the following weighting system:

A	4 grade points per unit earned
B	3 grade points per unit earned
C	2 grade points per unit earned
D	1 grade point per unit earned
F	0 grade points per unit attempted
INC.	0 grade points per unit

Grade point average is computed by dividing total units attempted into total grade points earned. Decision on probation and disqualification, scholarship eligibility for graduation and transfer are all influenced or even determined by grade point average; hence, students should pay constant attention to their own grade point standing.

GRADE REPORTS

Final grade reports will be issued at the end of each semester. In the absence of mistake, fraud, incompetency, or bad faith, the determination of the student's grades by the instructor shall be final once they have been filed in the Office of Admissions and Records. Questions regarding final grades should be brought to the attention of the Registrar during the semester immediately following.

HONORS

Students carrying twelve or more units in which letter grades are earned, who maintain a 3.0 or better grade point average during any semester, are placed on the "Deans' List." Students who have earned academic distinction are graduated with honors.

ACADEMIC PROBATION AND DISQUALIFICATION

Grossmont College believes that students who can profit from higher education should be encouraged to remain in school. Since the purpose of probation is to prompt academic improvement, any student placed on probation is encouraged to seek the assistance of his counselor to analyze the reasons for the academic deficiency and to explore means of corrective action.

PROBATION

Any student whose scholarship falls below a "C" average (2.0) for all college work attempted at Grossmont College, or in combination with previous work at another college, will be placed on probation.

Any student transferring from another college will be entered on probation if his total previous scholarship record was below a "C" average (2.0).

A student will be removed from probation when he has earned a "C" average or better on all college work attempted, including work taken at previous colleges and at Grossmont College.

DISQUALIFICATION

Any student on probation will be disqualified from further attendance when his cumulative deficiency becomes ten grade points or more.

Any student placed on probation with a deficiency of more than ten grade points will be disqualified from further attendance if he does not maintain a subsequent cumulative grade point average of 2.0 or better until within the ten point deficiency limit.

Any student who has been disqualified must remain out of school until one semester has elapsed. He may, however, attend Summer Session. (See Reinstatement.) Summer Session units and grade points are added to the cumulative totals; however, disqualification will not be computed until the end of the next regular session.

REINSTATEMENT

A disqualified student may be reinstated without a semester having elapsed if he qualifies under one of the following exceptions:

1. "B" average of at least 2 units in Summer Session.
2. Verified illness or accident over which the student has no control.
3. Death or illness or other verified emergency in immediate family.

Any student who believes that he is entitled to reinstatement must submit a petition stating his reasons and requesting consideration to the Petitions Committee. Such petitions may be obtained in the Counseling Center.

DISMISSAL FROM COLLEGE

Excessive absences, serious lack of academic effort or unsatisfactory citizenship, including deliberate falsification of information for the Office of Admissions and Records, are bases for dismissal from class or from the college.

REPETITION OF COURSES

A student is not obliged to repeat a course which he has failed unless it is a course required for graduation or for transfer or is prerequisite to another needed course.

If recommended by the student's counselor, a student may repeat any course where "D" or "F" grades were sustained; however, the listing of the original grade will remain as part of the permanent record. The units of the original course will not count toward graduation but will be considered as units attempted in computation of grade point average.

Credit for courses that are direct high school equivalents will be allowed only upon recommendation of the student's counselor and approval by the Dean of Guidance.

REVISION OF REGULATIONS

Any regulation adopted by the administration of Grossmont College shall have the same force as a printed regulation in the catalog and shall supersede any ruling on the same subject which may appear in the printed catalog or official bulletins of the college.

APPENDIX EXHIBIT 2 (Cont'd)
GROSSMONT COLLEGE CREDIT/NO CREDIT REGULATIONS, 1969-70

CREDIT/NO CREDIT PROCEDURE

In accordance with established Board policy, and pursuant to Section 130.5 of the California Education Code, Title 5, the faculty, students and administration recommend that credit/no credit grading be initiated at Grossmont College according to the following policy:

A. Definition of Credit/No Credit Grading

1. In courses where the student has elected credit/no credit grades, credit will be assigned for student achievement which is considered by the instructor to be passing. When student achievement is considered by the instructor to be failing, no credit will be assigned.

2. All units earned on a "credit/no credit" basis in California institutions of higher education or equivalent out-of-state institutions shall be counted in satisfaction of college curriculum requirements, but such courses shall be disregarded in determining a student's grade point average for all purposes for which a grade point average is required.

B. Courses to be Used in Credit/No Credit Grading

1. All courses offered at Grossmont College may be selected for grading either on a letter grade basis or on a "credit/no credit" basis, except where specific limitations appear in the course description. In all cases a student selecting a course for grading on either basis must have met course prerequisites and appropriate procedures, if any.

2. A maximum of 12 credit/no credit units (outside the major) may be counted in satisfaction of junior college general education and elective curriculum requirements.

C. Selection of the Credit/No Credit Option

1. Students electing to be graded on the "credit/no credit" basis shall establish that option with the instructor of the course; in writing, at the final examination in that class.

7/18/69

APPENDIX EXHIBIT 3:
CALIFORNIA ADMINISTRATIVE CODE
TITLE 5: EDUCATION RULES AND REGULATIONS
(SPECIAL REFERENCE TO JUNIOR COLLEGE STANDARDS)

130.5. Basis of Courses Offered. (a) The governing board may by regulation offer courses in either or both of the following categories, and shall specify in its catalog the category or categories in which the course falls: (In the absence of such regulation a course will be presumed to be offered on a letter-grade basis.)

(1) Courses wherein all students are evaluated on a "credit-no credit" basis.

(2) Courses wherein each student may elect on registration, or within a reasonable time thereafter, whether the basis of his evaluation is to be a "credit-no credit" or a letter grade.

(b) All units earned on a "credit-no credit" basis in California institutions of higher education or equivalent out-of-state institutions shall be counted in satisfaction of junior college curriculum requirements, but such courses shall be disregarded in determining a student's grade point average for all purposes for which a grade point average is required.

(c) The governing board may authorize a student who has received credit for a course taken on a "credit-no credit" basis within the district to convert this grade to a letter grade by taking an appropriate examination.

NOTE: Authority cited: Sections 152 and 25510, Education Code.
History: 1. New section filed 10-13-67 as an emergency; effective upon filing (Register 67, No. 41).
2. Certificate of Compliance--Section 11422.1, Gov. Code, filed 12-20-67 (Register 67, No. 51).

131. Requirements. The governing board of each district maintaining one or more junior colleges shall, as to each junior college, comply with the following requirements:

(a) Objectives. The junior college shall have stated objectives of its instructional program and the functions which it undertakes to perform.

(b) Curriculum. The junior college shall establish such programs of education and courses as will permit the realization of the objectives and functions of the junior college. Such courses shall be submitted to the State Department of Education for prior approval on forms provided by the State Superintendent of Public Instruction. The Department of Education shall report to the State Board of Education at a fall and a spring meeting the actions which it has taken in approving the courses.

(c) Faculty personnel. The junior college must have an adequate teaching staff of scholarship, experience, and teaching ability for each major field of the curriculum.

(d) Conditions of Instruction. The junior college must have a sufficient number of faculty members to enable students to receive individual guidance and assistance in learning and to permit the continued professional growth of the faculty members.

(e) Standards of Scholarship. The governing board of the junior college shall have adopted regulations consistent with this section and Section 131.7, establishing standards of scholarship for the continuance of students in the junior college and for graduation. The governing board shall have adopted rules setting forth the circumstances that shall warrant exceptions to the dismissal requirements herein set forth and shall file a copy of such rules with the State Board of Education. The regulations shall provide, among other things, that appropriate records shall be kept of every instance in which a student is so excepted. The standards shall be published in the college catalog under appropriate headings.

(1) Minimum standards shall require that a student be placed on probation and immediately notified that his performance is deficient or he shall be dismissed, in accordance with the requirements shown in the following table:

Grades Received	Grade Status Requiring Probation	Grade Status Requiring Dismissal
All of his grades are "credit-no credit" grades	"No-credit" grades in at least 1/2 but not 3/4 of units herein designated for a student in his status	"No-credit" grade in 3/4 or more of all units attempted in each of 3 consecutive semesters. (5 consecutive quarters)
All of his grades are letter grades Grade points are calculated as follows: A-4 grade points B-3 grade points C-2 grade points D-1 grade points F-no grade points	Grade point average for units herein designated for a student in his status is less than 2.0 but not less than 1.75	Grade point average of all units attempted in each of 3 consecutive semesters (5 consecutive quarters) is less than 1.75
Some of his grades are letter grades and some "credit-no credit" grades	Grade status in all units in each category falls in the applicable foregoing description	Grade status in all units so attempted in each category falls in the applicable foregoing description

STUDENT STATUS	UNITS DESIGNATED
He is transferring to the junior college	All units previously attempted in any college or university and in grades 13 and 14 of a junior college
He is a full-time student	Units attempted in grades 13 or 14 during the semester or quarter immediately preceding
He is a part-time student and has attempted in any college or university, or grades 13 or 14 of a junior college, a total of 12 semester units (or the equivalent of quarter units)	All units so attempted

(2) Minimum standards shall require that a student who has been dismissed shall not be reinstated until one semester (or if the college is on the quarter system, two quarters) has elapsed after the dismissal, unless the student comes within an exception set forth in rules adopted by the governing board.

(f) Library. The junior college shall have adequate working collections of books for each major field of the curriculum and to which new accessions must be made in accordance with student enrollments.

(g) Laboratories, Shops, and Facilities. The junior college shall have adequate equipment, materials, and furnishings for courses offered in agriculture, business and commercial education, fine arts, home economics, industrial and technical training, music, natural and physical sciences, and physical and health education.

(h) Counseling Services. The junior college shall have an adequate counseling staff, both in training and experience, and shall have established procedures, to provide, and shall provide, the following counseling services:

(1) Assisting each student in the college
(A) To determine his educational goal,
(B) To make a self-appraisal toward progress toward his goals.

(2) Providing each first-time freshman described in (A) or (B) who is enrolled in more than six units special individual or group counseling and guidance, arranging a study load suitable to his needs, and keeping an appropriate record of the student.

(A) He is a high school graduate, his scores on a qualifying test or tests were below an acceptable minimum for the college of attendance, and his grade point average in the last three years in high school was less than 2.0 (grade C on a five point scale with zero for an F grade), excluding only physical education and military science; or

(B) He is not a high school graduate, and his scores on a qualifying test or tests were below an acceptable minimum for the college of attendance and his grade point average in the years of high school attendance was less than 2.0 (grade C on a five point scale with zero for an F grade), excluding only physical education and military science.

(3) Providing to each student who is on probation individual counseling and guidance service, including regulation of his program according to his aptitude and achievements.

NOTE: Authority cited: Sections 152 and 25510, Education Code.
History:
1. Amendment filed 9-24-59; effective thirtieth day thereafter (Register 59, No. 10).
2. Amendment filed 2-25-63; effective thirtieth day thereafter (Register 63, No. 4).
3. Amendment filed 10-21-66; designated effective 7-1-67 (Register 66, No. 36)
4. Amendment filed 6-15-67 as an emergency; effective upon filing (Register 67, No. 24).
5. Amendment of subsection (e) filed 10-13-67 as an emergency; effective upon filing (Register 67, No. 41).
6. Certificate of Compliance--Section 11422.1, Gov. Code, filed 12-20-67 (Register 67, No. 51).

131.5. Criteria and Standards for Graded Junior College Courses in Grades 13 and 14. (a) Definition. For the purposes of this subsection, a course of study is defined as an organized sequence of courses of a college within a given subject area.

(b) Criteria. A graded course (class) in grade 13 or grade 14 shall possess one or more of the following characteristics:

(1) The course provides credit toward an associate degree; is normally considered of collegiate level; and is approved by the State Board of Education as a component of, a prerequisite to, or eligible as a required or elective course within a course of study which leads toward an associate degree.

(2) The course is approved by the State Board of Education, and is part of an occupational course of study of beyond high school level within the scope of the term "vocational and technical fields leading to employment" as the term is used in Education Code Section 22651 which leads toward an associate degree, an occupational certificate, or both.

(3) The course is approved by the State Board of Education and is recognized upon transfer by the University of California, a California state college, or an accredited independent college or university in California, as a part of:

(A) The required preparation toward a major;
(B) The general, or general education, requirement;
or
(C) The permissible or recommended elective credits.

(c) Standards. Any course meeting one or more of the above criteria shall meet all of the following standards:

(1) It is a course, approved by the State Board of Education, the content of which is organized to meet the requirements for the associate degree as specified in Section 131.7 or the requirements for an occupational certificate and is a part of a course of study not exceeding 70 units in length.

(2) It must be offered as described in the college catalog or a supplement thereto which provides an appropriate title, number, and accurate description of course content. A course outline is available at the college. Course requirements and credit awarded are consistent with Education Code Section 25518.5.

(3) It is a course in which are enrolled only those students who have met the prerequisites for the course.

(4) It is subject to the published standards of matriculation, attendance and achievement of the college, and the enrollees are awarded marks or grades on the basis of methods of evaluation set forth by the college and are subject to the standards of retention set forth in Section 131 or to such additional standards as may be established by the governing board of the district.

(5) It is a course in which enrollment shall not be repeated except in unusual circumstances and with the prior written permission from the district superintendent or his authorized representative or representatives.

NOTE: Additional authority cited: Section 5718.5, Education Code.

History:
1. New section filed 2-25-63; effective thirtieth day thereafter (Register 63, No. 4).
2. Amendment filed 6-15-67 as an emergency; effective upon filing (Register 67, No. 24).
3. Refiled 10-13-67 as an emergency; effective upon filing (Register 67, No. 41).
4. Certificate of Compliance--Section 11422.1, Gov. Code filed 12-20-67 (Register 67, No. 51).

Section 131.7 (in part), Title 5

ADMINISTRATIVE CODE

131.7. Requirements for Degrees and Certificates. (a) The governing board of a school district maintaining a junior college shall confer the degree of associate in arts upon the satisfactory completion in grades 13 and 14 of from 60 to 64 semester hours of work in a curriculum which the district accepts toward the degree (as shown by its catalog) and which includes the requirements listed in (1) through (5), provided that 12 of the required credit hours were secured in residence at that junior college. (The governing board may make exceptions to the residence requirement in any instance in which the governing board determines that an injustice or hardship would otherwise be placed upon an individual student.) "Satisfactory completion" means either credit earned on a "credit-no credit" basis or a grade point average of 2.0 (grade C on a five point scale with zero for an F grade) or better in 13th and 14th year graded courses in the curriculum upon which the degree is based.

Exhibit A: Statement on non-punitive grading from Southwestern College (Chula Vista). June, 1969.

June 16, 1969

NON-PUNITIVE GRADING

The concept of non-punitive grading has been under consideration by the staff at Southwestern College since the fall of 1967. The following is presented as background information.

The Role of Penalty Grades

The present standard grading system has evolved over the years to serve goals largely incompatible with the current and future roles of higher education in the United States. This grading system consists of positive grades (i.e. A, B, and C) to indicate and record achievement, and negative or penalty grades (i.e. D and F) which serve primarily to allow the grading system to be used to weed out some portion of the "less able" students in any given group. And although penalty grades appear inherently irrational, they have served their purpose. (This has been especially true at highly selective schools frequently committed to grading "on a curve." In these cases, the combination of curve grading and penalty grades has almost guaranteed the attrition of a given portion of each class of students.)

Generally, the university or college of the past has served two major functions:

1. to guarantee in the graduates some minimum level of vocational competency (in professional training) or of academic achievement (in a liberal arts education); and

2. to act as a hurdle system to sort students so that potential employers would know that while the graduates might not be either the brightest or the most knowledgeable individuals of their age group, the graduates were certified as having some combination of mental ability, knowledge, physical health, social graces, financial resources, initiative, cunning, virtue or chicanery which allowed them to successfully meet the hurdles of a college experience.

The penalty grading system has been a basic tool for implementing the hurdle dimension in higher education. However, a hurdle function tends to limit the educational function. (For example, terrible instruction by a professor can be accepted calmly if part of a hurdle system, but is inimical to the facilitation of learning.) And any hurdle function now seems in conflict with an emerging demand by society that colleges serve to educate all students to the fullest extent of their individual abilities and desires to learn.

The elimination of penalty grades would seem a natural development to facilitate increased emphasis on student learning as the primary goal of a college--at least at those institutions where student learning is the primary goal. And the facilitation of learning is perceived as the primary goal for Southwestern College.

Some Problems with Penalty Grades

The basic concern is that penalty grades cause considerable real, serious, and life-long damage to students; while at the same time they (penalty grades) seem unreasonable in concept and lacking in positive value insofar as any educational purposes are concerned.

The grade of "D" allows a student to pass all his courses and still fail college. It is a good enough grade to satisfy subject requirements for graduation, but it is not good enough to satisfy requirements for staying in school. At one and the same time, it grants units of college credit for unsatisfactory achievement, while penalizing the student for learning.

The grade of "F" even more pointedly implements the doubtful hypothesis that a student is worse off for having learned a little something than he was when he knew nothing. The "F" grade does not even confer credits applicable towards any degree objective, yet the student is required to learn an extra amount in some other area to offset the fact that he didn't learn "enough" in some area where he wasn't required to learn anything.

Consider: John and Mary graduate together from Chula Vista High School. John relaxes for the summer--camping, swimming, and fishing. Mary enrolls for summer session at Southwestern College. Because her father is a Chemist, Mary decides to take a Chemistry course. She learns some Chemistry, but not much. She fails the course.

In the fall, both John and Mary enroll in college transfer programs as History majors. From that time on they proceed through two years of identical work, and earn sixty units each with identical "C" average grades. What happens then? John graduates at Southwestern College and transfers to San Diego State College. Mary does not graduate. She cannot transfer and, as a matter of fact, she is still on probation.

She is on probation presumably because she did not learn enough Chemistry.

But John doesn't know any Chemistry at all. He never had a course in Chemistry in his life. Of the two, who knows the most Chemistry? Mary does. She did learn something, while John is totally ignorant of the subject. Yet, Mary is the one who is penalized because of a lack of knowledge in Chemistry.

Current practices actually treat a failing grade ("F") as if it indicated a loss in knowledge. Even though the failed course will not be counted among the student's units towards graduation, the "F" grade still generates a grade point deficit which must be overcome by extra achievement elsewhere. This seems terribly unreasonable, since even a failing student usually learns at least something, and he surely has not lost knowledge. And had Mary earned a grade of "D" she would have learned even more Chemistry, but she still would be unable either to graduate or transfer.

Why should a student be penalized for attempting to learn something? It would seem that "attempting to learn something" should be encouraged, not penalized.

For the student who is achieving in most of his courses, the present grading system imposes an unreasonable burden of "making up" grade points for those courses in which he does not achieve--a burden which may divert and delay his progression towards his real educational objective, or even thwart it entirely.

For the student who is not achieving in most areas, the traditional grading system serves a weeding-out function to separate him from the opportunity to learn even in those areas where he is achieving; and it also saddles the student with a permanent handicap (grade point deficit) for any future, perhaps more serious and/or well directed learning efforts throughout his life.

The proposals here presented for consideration are not an attempt to eliminate failure. (The attempt to minimize failure must be made by the students, counselors, and teachers; not by a grading system.)

The proposals are an attempt to create a learning climate more sharply directed at achievement, and more concerned with minimizing permanent damage to the persons involved when failure does occur.

Anticipated Merits of Non-punitive Grading

It is hoped that the adoption of Proposals #1 and #2 will have the following advantages:

1. The student will not be so concerned about withdrawing from a course (in which he is experiencing difficulty) before the fourth week, or the fifteenth week--or some other arbitrary deadline--but will remain in the course as long as he is learning something which he considers to be of value.
2. Consequently, more students will learn more in more courses.
3. Students will be encouraged to gain whatever benefit they can from the courses in which they enroll. (They will be encouraged to learn whatever they can from a course, without being penalized for not learning "enough.")
4. Removal of the fear (and threat) of official, permanent punishment for failure may encourage students to persevere in a course to the point where they ultimately succeed in achieving its objectives.

It is hoped that the adoption of Proposal #3 will produce perhaps even greater benefits in its impact on the learning climate at the college.

1. This policy would not give the student anything. It would, rather, focus attention positively on achievement as the only legitimate incentive recognized by the college, since we would officially abandon coersion by the threat of permanent punishment as a sanctioned instrument of college policy.

2. It would encourage student concentration on real learning needs or desires by minimizing the need to offset low grades by high ones--a situation which currently generates tremendous pressures on some students to select courses they don't want or need, but in which they enroll merely from a desperate need for a high grade somewhere.

3. It would protect the student--in the often great immaturity of his youth, or in the error of first false starts toward career identification and learning choices--from creating an always unreasonable and often insurmountable grade point deficit which may permanently impoverish his future. (To refer to student responsibility for his choices and actions may seem appropriate. And just so, those who choose and act wisely would progress. Those who choose and act unwisely would not progress. But no longer would we assume that an individual who is too young even to commit his next three years to car payments is somehow old enough to mortgage his entire economic and social life in a classroom. I think we should realize that an open-door college may constitute an "attractive nuisance" for some teen-age "infants"; and that rather than drown non-swimmers who stumble into the deep end of our unfenced pool, we should first assume responsibility for protecting them from permanent damage, and then encourage them to take swimming lessons.)

It is hoped that the adoption of Proposal #4 will provide the college with sufficient authority to force re-direction of learning efforts where called for, or to force the elimination of students in those extreme cases where such action is warranted.

General Comments

At least two junior colleges in California have already implemented systems of non-punitive grading, and several other colleges are considering such action.

Attached is a letter from the president of Santa Fe Junior College in Florida, where a non-punitive system has been adopted. It is perhaps significant that the idea was referred to him by Dr. B. Lamar Johnson who directs the Junior College Leadership Program at UCLA--which would seem to indicate that we are not apt to lose our academic reputation by taking action to eliminate punitive grades.

WSW:js

NON-PUNITIVE GRADING

The following policies are proposed for consideration and discussion at this time. It is anticipated that they will be recommended for approval at the July meeting.

For consideration:

1. Any student who withdraws or who is withdrawn from a class at any time, will receive a grade of "W".
2. A student may withdraw from a course without penalty any time prior to the final examination.
3. At the time of final examination a student may file with his instructor a Conditional Petition for Credit/No Credit Evaluation in which he may state the circumstance (i.e., if he would otherwise receive a letter grade of "D", or if he would otherwise receive a letter grade of "F") in which he would prefer that a grade of No Credit (non-penalty) be assigned instead of the "D" or "F" letter grade.
4. Any student who receives a total of fifteen (15) or more units of "W" grades, No Credit grades, or "W" and No Credit grades combined, within a period of two successive semesters of enrollment, is subject to dismissal and must petition for permission to enroll for a subsequent (third) semester. If the Probation and Retention Committee approves such a petition, the Committee may establish such conditions for continued enrollment as it deems appropriate.

These policies have received the affirmative recommendation of the faculty, the Student Council, and the Executive Committee of the college.

Exhibit B: Statements on non-punitive grading from San Jose City College, July, 1969.

FROM: GRADING POLICIES SUBCOMMITTEE

TO: IPC

FINAL REPORT

This committee was given the following charges:

"1. Gather information pertinent to grading as a means of evaluation, perhaps considering each punitive grade separately.

2. Study and analyze recent data relative to grading.

3. Write a policy deleting punitive grades and provide supporting data.

4. Suggest methods of implementation."

There is a definite trend among colleges toward a reduction in the punitive aspects of grading. In the Bay Area, for example, at least one college has done away with D and F grades and replaced them with an automatic grade of W. One college has given the student the option of taking a grade of W in place of any grade he might receive, and one university has eliminated letter grades altogether in favor of a pass/fail system. Nearly every college in the Bay Area is considering a change in its grading policy in the direction of becoming less punitive.

The reasons for these changes appear to be: (1) Statistical evidence of a lack of correlation between college grades and later success; (2) psychological evidence that grades are a poor means of motivating true learning; and (3) the belief that spending a semester in a course without receiving credit is a punishment and that punitive grades constitute a double punishment.

The committee attempted to write a policy that would:

1. Eliminate punitive grades.

2. Be simple.

3. Be a modest step that could be tested for a year and then modified further if necessary.

The committee recommends the following policy:

The grading system should be kept exactly as it is with these changes. During the last two weeks of each semester a student should be given the option of receiving a grade of N in place of any particular letter grade(s) (as specified by him) that he might receive.

For example, a student might request that he be assigned a final grade of N should his course grade fall below a C. Or he might elect to take the regular letter grade if it is A, B, C, or D but receive an N if the grade would have been F. He might even request an N if his grade would have been less than B.

It is understood that the grade of N would not affect the student's grade point average; that it would be applicable for G. I. Bill benefits but it would not represent units completed and thus would not apply toward such things as graduation or draft exemption. Thus Parkinson's suggestion that one be issued a birth certificate and a Ph.D. diploma at birth would not be served.

The committee recommends the continuance of the Credit/No-credit policy as an encouragement to students to experiment by attempting courses in a variety of fields. After a year, a determination should be made as to how many students still use the Credit/No-credit policy. If nearly all students have used the N-option in preference to Credit/No-credit, the Credit/No-credit policy might then be eliminated.

It is also recommended that the entire grading policy be reviewed after a year to evaluate the effects of the change to the N-option policy.

THE GRADING POLICIES SUBCOMMITTEE

Eliot Wirt, Chairman
Jack Alves
Paul Becker
Marjorie Blaha
Jack Browne
Stock Cortez
Mark Marcus

SUGGESTED CONTRACT FORM:

NOTE: This contract will be on a prepunched IBM card with student's name, number, course and instructor. A card (contract) will be provided for each student in every course.

THIS FORM IS TO BE RETAINED BY INSTRUCTOR: IT IS NOT TO BE FORWARDED TO THE RECORDS OFFICE; IT IS NOT TO BE USED BY STUDENTS WHO HAVE ELECTED CREDIT/ NO-CREDIT.

GRADE OPTION PETITION

(For use during the final two weeks of the semester)

Semester_____________________

Course_____________________________

Instructor__________________________

Class Section_______________________

I, ________________________________, request that I have a final grade of N recorded on my permanent records if my final grade is below ________. I understand that should an N grade be recorded I will receive no credit for the course and that my attendance in this course will not meet any prerequisites for other courses. I also understand that my decision is final and that the grade cannot be changed at a later date.

My signature below indicates that I have read and understand all of the above.

________________	________________________	______________
Date	Student Signature	S.S. No.

July 1969

TO: San Jose Junior College Board of Trustees

FROM: Instructional Policies Subcommittee on Grading Policy

SUBJECT: Background for Recommended Change in Grade Policy

These are exciting times. In the next few years we can expect to see major changes in the methodology of higher education. Students, faculty, administrators, school board officials, and private citizens are calling for changes in a system which has seen very little change in more than one-hundred years.

Many people are beginning to realize that community colleges are best suited to lead the way in bringing about needed changes in higher education. In an article in the Junior College Journal, Cleveland's mayor Carl B. Stokes has written: "I firmly believe that there is no group better suited to be of immense help to those of us engaged in meeting America's greatest challenge--the urban crisis--no group better suited in terms of philosophy, past performance, background, and commitment than you who are engaged in and by our junior colleges."[1] Community colleges are just as ideally suited to deal with America's education crisis. Most of the innovations in methods of higher education are taking place in the nation's community colleges. The recent suggestions by U.R.S. for the future of San Jose Junior College District are just one example.

One big problem in making constructive changes in the college is the policy of giving grades. Psychiatrist William Glasser writes: "Underlying the resistance to change is a general attitude probably induced by the atmosphere of grades and failure that dominates both the students and the teacher."[2] In the June 10, 1969 issue of _Look_ magazine, senior editor George B. Leonard writes: "Grades are the glue that

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1. Carl B. Stokes, "Social Action and the Community College," _Junior College Journal_, April 1969.
2. William Glasser, M.D., _Schools Without Failure_, p. 114.
3. George B. Leonard, "Beyond Campus Chaos: A Bold Plan for Peace," _Look_ (June 10, 1969), 76.

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holds an obsolete contraption called college together."[3] The National Association recently predicted that in a very few years, grades would be a thing of the past. "Richard Reynolds, writing in the Los Angeles Times in the winter of 1966, reports in an article entitled 'The Obsession with Good Grades Can Be a Harmful Classroom Disease':

> A team of University of Utah professors made a survey of doctors in 1964 and came up with this result which it reported to the American Association of Medical Colleges:
>
> 'There is almost no relationship between the grades a student gets in medical school and his competence and success in medical practice'. . . .
>
> This astounded the leader of the research team, Dr. Philip B. Price. He called it a 'shocking finding to a medical educator like myself who has spent his professional life selecting applicants for admission to medical school.' And he added that it caused him to question the adequacy of grades not only in selecting those who should be admitted, but also in measuring a student's progress.
>
> Just as amazed as Dr. Price was the leader of another research team in New York, Dr. Eli Ginzberg, whose group made a somewhat similar survey. That team took as subjects 342 graduate students in various fields who had won fellowships to Columbia University between 1944 and 1950. Ginzberg and his associates set out to learn how successful these 342 persons had become, fifteen years after they completed their fellowships. The discovery that shocked them was this:
>
> Those who had graduated from college with honors, who had won scholastic medals, who had been elected to Phi Beta Kappa, were more likely to be in the lower professional performance levels than in the top levels!"[1]

The shift away from grades, at the college level, is already underway. Western Reserve University Medical School did away with grades more than twenty years ago, and their students do very well in national testing.[2] More recently, the City College of New York has done away with the letter grades of D and F. Closer to home, the University of California at Santa Cruz has only a pass/no-pass system. Laney College gives the student the option of receiving a W instead of the grade earned. College of Marin has replaced D and F grades with an automatic grade of W. Nearly every college has a committee studying the problem of grades with an eye to making constructive changes.

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[1] Classer, op. cit., pp. 61-62.

[2] Ibid. p. 68.

In February of this year the Instructional Policies Committee of San Jose City College formed a subcommittee and gave it the following charges:

1. Gather information pertinent to grading as a means of evaluating, perhaps considering each punitive grade separately.
2. Study and analyze recent data relative to grading.
3. Write a policy deleting punitive grades and provide supporting data.

The subcommittee consisted of Eliot Wirt (mathematics), chairman, Jack Alves (biology), Eustaquio Cortez (auto mechanics), Marjory Blaha (English), Marc Marcus (counseling), Paul Becker (Dean of Student Services) and Jack Browne (student).

After complying with the first two charges, the subcommittee came up with the following recommendation:

> "The grading system should be kept exactly as it is with one minor change. During the last week of each semester a student would be given the option of receiving a grade of N in place of any particular letter grade(s) (as specified by him) that he might receive."

For example, a student might request that he be assigned a final grade of N should his grade fall below C. On the other hand, since the grade of N results in no grade points or other credit, a student might prefer to keep the passing grade of D (if that should be his grade) in order to complete the course requirement. The student makes the choice.

The proposal went to the I.P.C. where it was approved with minor wording changes and was sent on to the Faculty Senate. After much discussion the Faculty Senate approved the proposal with only one dissenting vote. The Senate alwo voted to add to the proposal to make a grade of F automatically become an N.

There are many arguments for doing away with punitive grades but one of the strongest is that they constitute a double penalty. The student who receives a grade of N in a course has nothing concrete to show for the four months he spent in the class. In addition, he is penalized the money he has spent for books, materials, and transportation not to mention what he could have earned if he had been working rather than sitting in class. The F grade carries the additional penalty of lowering his grade point average thereby pushing him farther from his educational objectives. Glasser says: "People should have second chances, third chances, fourth and fifth chances, because there is no harm either to them or to society in giving them many chances. On the contrary, there is every benefit to them and to society in giving them an opportunity to rise above previous mistakes. As long as we label people failures at some time in their lives and then damn them for the rest of their lives for this failure through grades, we will perpetuate misery, frustration, and delinquency."[1] It is emphasized that the proposed policy does not give the student anything. He still must achieve grades and grade points to obtain a degree and/or go on to a four-year college. The proposal simply removes the double penalty for low achievement and guarantees that the "open door" of the "open door college" will remain open.

Arguments that have been offered against the proposal have tended to represent two basic concerns. The first is the matter of motivation. For years, psychologists have told us that the extrinsic motivation of the hickory stick (or equivalently the threat of low grades and expulsion) is the weakest sort of motivation. The student can be forced to sit in class and may even be induced to temporarily memorize some facts in an effort to pass the course but he must be genuinely interested in the subject matter for any real learning to take place. If he is interested he will learn and if he is not interested he will not learn. Think of your own learning experiences and see if this has not been so in your case. When students call for relevance they are speaking to this point.

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[1] Glasser. op. cit., p. 64.

The other basic concern has been about the proposal's effect on other institutions along the line. This proposal will have less effect on other institutions than the credit/no-credit policy that has been used this year. Mr. Becker has looked into this matter and reports that there are absolutely no problems of transferability. The feeling is growing that other institutions should do their own testing and not depend on a person's former grades. Terry O'Bannion of the University of Illinois says the claim that the A, B, C, D, F grading system is a universal language understood by everyone is a myth. In a recent issue of the Junior College Journal he wrote: "The myth suggests that all students are graded the same in every institution. An 'A' at Harvard, however, does not mean the same thing as an 'A' at Parsons. Even within the same university, colleges grade differently; within colleges, departments grade differently; within departments, divisions grade differently; within divisions, instructors grade differently. Students know well that instructors teaching the same course do not grade the same. There is often a great deal of difference when two instructors grade the same student for the same course."[1]

If San Jose City College is to keep up with the times in the coming years, it must "loosen the glue" and change its grading policy. The current proposal is a modest step that can be tried and then reevaluated. It may be that this policy will ultimately replace the credit/no-credit policy. It may be that this policy will prove to be non-productive in which case we can return to the old system. At any rate, this seems a very desirable first step.

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1. Terry O'Bannion, "Rules and Regulations: Philosophy and Practice," Junior College Journal, (April 1969), 14.

Exhibit C: Preliminary research findings of Merle A. Dietz, Assistant Dean of Instruction at Los Angeles Harbor College, relative to changes in grading systems that will affect probationary statistics. (Copy received July, 1969.)

CHAPTER IV

FINDINGS RELATIVE TO CHANGES IN GRADING SYSTEMS THAT WILL ALTER PROBATIONARY STATISTICS

Many California community colleges have moved from the traditional grading system and implemented non-penalty plans. It is the purpose of this chapter to report the answers to the question, "Are you now pursuing or experimenting with a grading policy that will change the number of students on probation (for example, giving only A, B, C, and W grades or allowing students to drop certain grades upon a change of major)?"

Eighty-one college deans responded to this question. Fifty-five answered in the affirmative--that they either had a policy or were experimenting with one that would reduce the number of penalty grades. Their answers fall into five general categories: liberalized withdrawal, credit/no-credit grading, forgiveness of penalty grades, elimination of "F" grades, and replacement of penalty grades by repetition of courses.

Liberalized Withdrawals

The proponents of liberalized withdrawal claim the advantages are that the student is not irrevocably locked into a grading system over which he has no control, that it places the responsibility on the student for the grade he receives in the class, that fear of failure in a student already uncertain of his ability is a poor means of motivation and acts to reduce his chances of success, and that a single neutral withdrawal grade would clarify misinterpretations of WU and WF and end the confusion on withdrawal deadlines.

Furthermore, it is claimed that unlimited withdrawal would encourage the exploration of courses in which the student has had no previous work and thus no way of determining his ability to succeed. Supporters of unlimited withdrawal claim that successful students cannot be produced from unsuccessful ones in one or two semesters, and that punitive grades encourage drop-outs and negates the salvage function of the community colleges. (Pedler)

The arguments against a liberalized grading system are usually of a more practical nature. (Brooks, 14). It is argued that many community colleges will not be able to enroll all applicants and thus it is unwise to retain students where progress is questionable when better students are turned away. It is felt that such a system would greatly increase the withdrawal rate with the accompanying problem of full teaching loads at the beginning of the semester and a lack of students in the later weeks. It is the opinion of opponents of unlimited withdrawals that irresponsibility would be encouraged and that students capable of doing acceptable work would take the easy withdrawal route out rather than do a reasonable amount of study.

In spite of the sound arguments against liberalized withdrawal policies, at least twenty colleges have moved the deadline of withdrawal without penalty from early in the semester to the eighth, twelfth, or even the twentieth week. Southwestern College and Riverside City College indicated non-penalty withdrawal deadlines in the fifteenth or sixteenth week. Eight colleges, Shasta, Siskiyou, Sierra, San Joaquin Delta, Mira Costa, Contra Costa, Chaffey, and Coalinga allow unrestricted withdrawal up to the final examination. Barstow College has discarded the arbitrary "drop period" and is permitting "free rein to the instructors on dropping students without prejudice at any time." (Chamberlin) Grossmont College policy is similar in that "the W may be 'instructor assigned' at the close of the semester." (Vander Poll) Cabrillo College writes that students drop with a "W" at almost any time. (Roberts)

Going even further, Laney College policy mandates that all students who drop officially or unofficially at any time during the semester must receive a "W" grade. A student may drop a class even after taking the final examination. Santa Barbara indicates they are studying the Laney policy. Gavlin College operates its grading system on a similar non-punitive basis and does not issue grades of "F." "W" grades are substituted for "F's" or for "Incompletes" that are not made up.

San Jose City College has a unique policy of giving a student the option of receiving a grade of "N" (equivalent to a "W") for any particular letter grade he might otherwise receive. A form submitted to the instructor by the student requests that an "N" grade be recorded on the permanent records if the final grade falls below a specific grade. The student signs that he understands that no credit will be received and attendance meets no prerequisite for other courses. It must be recognized that a student may choose to receive a "D" grade to meet a prerequisite or to satisfy the load requirements for draft deferment, veteran benefits, or other obligations. Thus a system that does not include the grade of "D" may be punitive for a student who earns a "D" and needs it.

Napa College gives "W" grades to all students who do not take the final examination. Thus a student may choose not to receive a low grade by simply not taking the final. This policy "will eliminate the confusion that now exists because a student is never certain he has been withdrawn from class and at times receives a surprise "F" for a course he has never attended." (Pedler)

When Shasta College moved to a liberalized withdrawal policy, allowing withdrawal up to the final examination, the faculty was concerned that the number of withdrawals would increase alarmingly. A study completed in June, 1968, of the grades of 12,000 students showed an increase of withdrawal grades from 18 per cent in Fall 1966 to 25 per cent in Fall 1967. However, the penalty grades ("D," "F," and "WF") fell from 11 per cent to 5 per cent. As a result, the percentage of withdrawal and penalty grades combined changed only from 29 per cent to 30 per cent when the liberalized withdrawal system was implemented. The grade point average for first- and full-time freshmen rose from 1.96 in the Fall, 1966 to 2.37 in the Fall, 1967. Brooks concludes that the unlimited withdrawal policy was successful--that students did not use the option of withdrawal irresponsibly, that there was no significant decrease in the percentage of "C" or better grades, and that the faculty supports the liberalized policy. (Brooks, 19)

Credit/No-Credit

Many colleges are offering credit/no-credit grades under a variety of circumstances. The University of California at Los Angeles allows an undergraduate in good standing to enroll in one course each quarter on a passed/not passed basis. A grade of passed is awarded only for work which would otherwise receive a grade of "C" or better. Courses taken on a passed/not passed basis are disregarded in determining a student's grade point average. Even though the University and State College systems have given academic respectability to credit/no-credit, and Title 5 officially permits this practice, the junior colleges have not moved rapidly in this field.

Los Angeles Pierce, Rio Hondo, San Jose, Golden West, Sacramento City, Siskiyou, American River, Chabot, Cabrillo, and Contra Costa indicate that they are using credit/no-credit plans. Grossmont, De Anza, and Santa Rosa have a limited program, while Merritt and Bakersfield are considering credit/no-credit proposals.

Rio Hondo Junior College exemplifies credit/no-credit policies, allowing any student to enroll in one course each semester on a credit/no-credit basis. Its policy is designed to encourage students to explore courses in areas of special interest but in which they feel they may lack competence. Credits earned on this basis count toward graduation requirements but are not computed in the grade point average. The designation "Credit" is substituted for letter grades "A," "B," "C," and "D" assigned by the instructor; "F" and "Incomplete" are designated "No-credit" on the permanent record. Students requesting a credit/no-credit grade may elect at a later time in the semester to receive a lstter grade in the course, but must notify the Admissions and Records Office approximately five weeks before the end of the semester. The student may be permitted, at the discretion of the Admissions Office, to change a "Credit" grade to the letter grade originally awarded by the instructor.

Grossmont College permits the student to choose credit/no-credit grades until the final examination. At Sacramento City the teacher reports both letter grades and credit/no-credit grades for those students electing the latter. If the letter grade is a "B" or better, the student may request that the "Credit" be changed to the letter grade.

The credit/no-credit policy not only allows a student to explore subjects in which he is uncertain of success, but in those cases in which the evaluation can be changed to a letter grade after the final test, it allows the student to retain the benefit of "B" or better grades and to reject "D's" and "F's" which would reduce his grade point average. The A, B, C, No-Credit policy used in some courses at Orange Coast and tried experimentally at Harbor and other colleges accomplishes this same purpose. This policy does penalize the student who needs a passing "D" grade for athletic eligibility, draft deferment, etc.

While some colleges warn of the danger that "credit" courses may not be accepted, the University of California gives full credit to junior college credit grades upon transfer. Junior college transfers who were scholastically ineligible at the time of high school graduation are limited to only 14 units on a credit/no-credit basis. Forty-two units must have letter grades from which the grade point average can be calculated. Thus the minimum requirement at the University of California of 56 semester units of transferable work with at least a 2.4 average can be met with 42 units with letter grades and 14 units on a credit/no-credit basis. Departments within the University may require repitition of courses in preparation for their major if those courses are taken on a credit/no-credit basis. (University of California, Office of Relations with Schools.)

The California State Colleges state that the "nature of grades assigned or the means by which credit is earned will have no bearing on our credit-granting policies so long as credit is awarded by the junior college for its own courses." (The California State Colleges, Office of the Chancellor.)

While some State colleges may count "no-credit" grades as "F," Los Angeles, Fullerton, Long Beach, San Fernando and Dominguiz do not. These five simply line-out "No-Credit" classes, counting neither units nor grades in the calculation of grade point average.

Credit/no-credit grading policies are usually adopted to permit an average or better student to explore fields of knowledge in which he is uncertain of his ability to obtain a grade that will not lower his grade point average. For the student of lower ability, who may anticipate a "C," it is not only a non-punitive grade, but may be the deciding factor in his exploration of unknown areas.

Forgiveness of Penalty Grades

Changes in the California Administration Code, Title 5, in 1966 opened the door to the forgiveness of "F" grades. Section 131.7 of the Code reads,

> "(a) The governing board of a school district maintaining a junior college shall confer the degree of associate in arts upon the satisfactory completion in grades 13 and 14 of from 60 to 64 semester hours in a curriculum which the district accepts toward the degree (as shown by its catalog) . . ."

This paragraph is interpreted to mean that a student can exclude penalty grades received in courses not included in the curriculum in which he wishes to graduate.

It was the intent of the advisory committee to the State Board of Education that the forgiveness clause apply only to two-year curriculum but the law as actually written can apply to transfer majors as well. (Min. Col. Cur. Coord. Com. March 16, 1967.) In a communique to all colleges, Paul E. Laurence, Associate Superintendent of Public Instruction and Chief, Division of Higher Education, clarified this point. He stated that while Section 131.7 makes forgiveness of "F" grades mandatory with change of major, the college maintains control of the curricula in which the law is applicable. The State Board of Education in writing the Code felt that a student who tried a transfer program and failed should not be penalized to such an extent that he would never be able to get a two-year terminal degree. (17) Cuesta College, College of the Redwoods, Los Angeles Harbor College, Merced College, Orange Coast College, Mt. San Jacinto College, Monterey Peninsula College, and Fullerton Junior College indicated on the questionnaire that they were implementing this legislation.

In the application of this forgiveness clause, a college may restrict the number of major changes as Mt. San Jacinto does, and usually warns the student that failing grades will not be forgiven by four-year institutions. Nevertheless, many students in California junior colleges are raising their grade point average by changing the majors in which they graduate.

Elimination of F Grades

Three colleges report that they have eliminated "F" grades. The College of Marin has only four grade symbols, A, B, C, and NC, while Gavilan and

Contra Costa use only the letters, A, B, C, D, W. The elimination of the "D" grade may be punitive in certain cases, for example, for the students who need a full load for athletic eligibility or draft deferment.

Porterville gives no failing grades until the final. If a student does not take the final the instructor has the option of ruling that the grade be "F" but during the trial semester, Spring, 1969, no "F's" were given to withdrawing students. Many colleges, among them Yuba, Monterey, Merritt, Compton, and Grossmont report that they are studying grading systems that do not include "F's." San Bernardino, Sequoia, Harbor and Orange Coast are experimenting in limited areas with non-penalty grading to test the reaction of the faculty and students to the elimination of "D's" or "D's" and "F'."

The Advisory Committee on Afro-American and Mexican-American Studies of Los Angeles Community Colleges states the case for the abolition of "F" grades in a recommendation to the Council of Presidents.

> "Many minority students have faced enough failure in life without having them receive enforced F's. The F grade should be done away with, keeping the A, B, C, D, and non-accreditation or NO CREDIT (N.C.) system instituted. The latter is favored over the present Incomplete grading system, which automatically turns into an F after a year's time, thereby also continuing to punish students. The consensus of the committee is that punitive grades are pointless, e.g., F grades encourage college dropouts. It is time to re-evaluate the total grading system in contemporary America in our educational system." (Los Angeles Board of Education, College Division)

Replacement of Penalty Grades by Repetition of Courses

When students at Hartnell College repeat a course in which they have earned a "D" or an "F" grade, the grade received upon repetition is accepted in place of the established earlier grade. The first grade is lined out, not erased, on the transcript. Neither the units nor grade associated with the first attempt will be included in computing the student's grade point average. A student cannot erase a poor grade earned at another college, nor can course work be transferred to Hartnell replace grades earned at Hartnell. A course may be repeated only once.

San Mateo College, De Anza College, Grossmont College, and College of the Siskiyous follow similar policies, with De Anza the most liberal, allowing students to repeat any course and count the better grade. The junior colleges are not alone in this practice. Students at Sacramento State College may repeat courses in which they have earned penalty grades. The grade earned in the second or last enrollment will be used to determine the grade points earned for that particular course. Courses may be repeated more than once only with the permission of the advisor, instructor, department head, and school dean or division chairman. (Sacramento State College)

In the University of California system, an undergraduate who repeats a course in which he received a "D" or "F" will have his grade point average computed on the most recently earned grades and grade points. Only sixteen quarter units can be used for replacement of penalty grades. In the case of further repetition, the grade point average is based on all grades assigned and total units attempted. A regulation adopted by the Board of Admissions and Relations with Schools extends this privilege to courses taken in the community college by transferring students. (University of California)

Summary

The California community colleges are pursuing or experimenting with non-penalty grading systems that will reduce the number of students on probation. Sixty-eight per cent of the respondents were trying some form of liberalized withdrawal, credit/no-credit grading, forgiveness of penalty grades, elimination of "F" grades, or replacement of penalty grades by the repetition of courses.

The greatest number of changes seem to be in the area of liberalized withdrawal. While some colleges have made modest changes, moving the withdrawal-without-penalty date to the eighth, twelfth, or sixteenth week, other colleges have made drastic changes that allow the student to choose a withdrawal rather than a penalty grade, even after the final test results are known. Obviously when "D's" and "F's" are replaced with non-penalty "W's," the student's grade point average will be higher. Respondents who support liberalized withdrawal stress the advantages to the student in allowing him to explore courses in which he fears failure, without jeopardizing his grade point average. Opponents of liberalized withdrawal point out that poor students may remain in college while better students are turned away because of increasing enrollment and inadequate budgets.

Credit/no-credit plans are in operation in many colleges and have received the academic blessing of the university and state college systems in California. Penalty grades are being forgiven when students change their major. Three colleges report that they have eliminated "F" grades, retaining only the symbols A, B, C, and NC or A, B, C, D, and W. And, lastly, penalty grades are being replaced, upon the repetition of courses, in several community colleges, the state college system, and the University of California.

References

Pedler, A. Establishment of a New W Policy. Napa, Calif. Napa College, March 11, 1969. (Mimeo)

Brooks, L. Walter. A Study of Penalty Grading and Probation Practices at Shasta College. Redding, Calif. Shasta College, June, 1968. (Mimeo)

The California State Colleges, Office of the Chancellor. (Letter from Robert O. Bess, Director, to Albert Caliguiri, Los Angeles Junior College Curriculum Coordinator.) Los Angeles, Calif., October 7, 1968.

University of California, Office of Relations with Schools. (Letter from Vern W. Robinson to Albert Caliguiri, Los Angeles Junior College Curriculum Coordinator.) Los Angeles, Calif., September 30, 1968.

University of California. Working Rules 3330, 3331, 3332 - Revision. (Memorandum to Admissions Staff from Lyle G. Gandey, Director of Admissions and University Registrar.) Berkeley, Calif., January 22, 1969.

Los Angeles Board of Education, College Division. "Recommended Abolition of "F" Grade." On Record. Vol. 1, No. 31, May 15, 1969.

University of California, "New Rule on Repetition Affects Transfer Students," California Notes. Volume 14, No. 6, March 1969, Berkeley, California.

Sacramento State College. General Catalogue, 1968-69. Sacramento, Calif.

Exhibit D: Statement of Credit-No Credit grading policy at Antelope Valley College, (Lancaster). Approval date: April, 1969.

Board Policies 6247

Credit, No-Credit Grading Option

Students attending Antelope Valley College have the option, at the time of registration, of taking those classes so designated, subject to the limitations listed below, for a grade of credit/no-credit in lieu of a grade of A, B, C, D, F, or W. The purpose of making this option available is to allow the student the opportunity to explore the various disciplines within the college without the risk of endangering his grade point average.

A. The student may elect a credit/no-credit grade option for a maximum of two classes per student per semester. This option is open to all students.

B. The option must be exercised at the time of registration.

C. The placement test prerequisite is eliminated for those courses taken for a grade of credit/no-credit.

D. The option will be available for those classes recommended by the division in which the class is taught. The recommendation will be submitted to and acted upon by the committee of the Division Chairman.

E. The instructors will maintain all student records inthe same manner as they have in the past. A grade of A, B, C, D, F, or W will be posted to all appropriate student records except the transcript. The transcript would carry the grade "Credit" or "No-Credit" for the class in which the student had elected this option at the time of registration. Unit value of the class will be indicated but grade points will be neither posted to the record nor counted in computing the grade point average.

F. A grade of A, B, C, or D will be posted to the transcript as a grade of "Credit" and grades of F or W will be posted as "No-Credit."

Approved:
April 7, 1969

Exhibit E: Statement of proposed Credit-No-Credit grading policy from Bakersfield College. (Statement date: April, 1969.)

BAKERSFIELD COLLEGE
April 24, 1969

FROM: Mr. W. J. Heffernan, Dean of Student Personnel

TO: Curriculum Committee

SUBJECT: Proposal Concerning Credit-No-Credit Grading

CREDIT-NO-CREDIT

Some courses are offered on a credit-no-credit basis. Upon successful completion of such a course, unit credit will be awarded. However, courses taken on a credit-no-credit basis are not used in the computation of a student's grade point average. Regulations for such courses are:

1. A maximum of 12 units may be taken on a credit-no-credit basis and apply toward the AA degree at Bakersfield College.
2. A maximum of three units per semester may be taken on a credit-no-credit basis. Exceptions to this rule may be made by the Director of Admissions and Records in cases involving special remedial programs; however, a maximum of six units on a credit-no-credit basis would be allowed in such exceptional cases.
3. In courses in which credit-no-credit is authorized, the credit grade is granted for performance which is equivalent to the letter grade of "C" or better.
4. Combination classes (credit-no-credit or grades) must have an A, B, C, D, F, or credit-no-credit system.
5. The time to elect credit-no-credit or grades shall be no later than the end of the sixth week of the semester. It is presumed that a student will be taking a combination class on a grade basis unless he has petitioned for credit-no-credit by the end of the sixth week. A student who has petitioned to take a course on a credit-no-credit basis before the end of the sixth week may petition to receive a letter grade if such petition is filed by the end of the sixth week. Such petitions must be filed in the Records Office.
6. When a student has established the basis for grading as credit-no-credit or a letter grade, he may not elect to change after the established deadline.
7. Courses in which credit-no-credit grading may be used must be so designated by the department involved. A department may require majors to obtain letter grades in that department's major subjects.

Exhibit F: Statement of policy on Credit-No Credit grading from Cuesta College (San Luis Obispo). Approval date: March, 1969.

CUESTA COLLEGE

BOARD POLICY FOR "CREDIT-NO CREDIT" GRADING
(Approved March 3, 1969)

"CREDIT-NO CREDIT" GRADING 5158

To provide educational opportunities for students to pursue studies outside the major field, to encourage innovation and experimentation in curriculum, and to encourage general education, students may enroll in courses for "credit-no credit" grading as specified in Administrative Code, Title 5, Section 130.5.

REGULATIONS AND PROCEDURES FOR "CREDIT-NO CREDIT" GRADING R5158

A. General

1. A student may at the time of registration enroll in not more than one class on a "credit-no credit" basis providing the course is outside the student's major.

2 No more than 12 units of "credit-no credit" may be applied toward the Associate in Arts or Associate in Science Degrees.

3. Any one course may be taken on a "credit-no credit" basis only once. A course may be repeated as a course for which letter grades are assigned.

4. Each Division shall determine which courses it will designate as appropriate for "credit-no credit" grading by placing all courses in one of the following categories:

   a. Only letter grades will be assigned.

   b. Students may elect to receive letter or "credit-no credit" grades

   c. All grades in the course shall be "credit-no credit."

5. Courses designated in the above categories shall be identified in the Class Schedule as well as in course outlines.

6. Unit and course credit shall be granted on a "credit-no credit" basis under the following conditions:

   a. The student is held responsible for all assignments and examinations required in the course.

   b. The standards of evaluation are identical for all students in the course.

   c. Attendance requirements are identical for all students in the course.

B. Grading

1. Instructors shall maintain the same grade records for the "credit-no credit" student as for the other students enrolled in the course.

2. Students graded on a "credit-no credit" basis shall receive a "CR" (credit) if, at the end of the semester, a grade of "D" or better is earned. The "CR" shall, when recorded, add units accomplished but shall have no effect on the grade point average.

   Those students doing work that is unsatisfactory (grade of "F") shall receive an "NC" (no credit) which, when recorded, shall be disregarded in determining grade point average for all purposes for which such a grade point average is required.

3. If a student wishes to change a "CR" (credit) grade to a letter designation, he may utilize established procedures for credit by examination after completion of the course.

4. An "NC" (no credit) grade may not be changed to a letter grade by examination.

5. In case of withdrawal from a "credit-no credit" course, the student shall receive a "W" regardless of his status at any time during the semester.

6. In case a student in a "credit-no credit" course receives an incomplete grade, the incomplete must be removed within one semester of its receipt. If the incomplete is not removed, the grade becomes "NC" (no credit).

FRM:eh
3/4/69
4/4/69

In accordance with the California State Education Code and with authorization of the Governing Board of the Contra Costa Junior College District, the Diablo Valley College Faculty added the following grades effective September 1969. Their chief value is to the stronger student who may want to attempt courses beyond his area of already developed expertness.

Cr	means that the student has performed at the C level or better. Units are earned but no grade points are assigned. Will not be used to compute grade point average except as noted below.
NCr	means that the student has not performed sufficiently well to receive units of credit. It does not affect a student's grade point average, but it will be a factor in deciding whether a student is placed on probation.

Transferability of Cr Grades

UNIVERSITY OF CALIFORNIA, all campuses: Students eligible to enter the University at high school graduation may transfer Cr grades without reservation.

Students ineligible upon high school graduation must present 56 units with letter grades and with a Grade Point Average of 2.4 to be admitted; however, if their ineligibility resulted from scholarship rather than failure to complete the necessary courses, they need present but 42 units with letter grades and a GPA of 2.4. Units beyond the 56 or 42 may be taken with Cr grades.

STATE COLLEGES (applies to Chico, Sacramento, Stanislaus, Fresno, Humboldt, Sonoma, San Francisco, Hayward, San Jose and Cal Poly at San Luis Obispo). These colleges will accept all units awarded by Diablo Valley College with Cr grades without limit and will not include the Cr grades when computing grade point averages with these exceptions:

> Sacramento State may limit the number of units carrying Cr grades which may be applied to the B.A. or B.S. degree to 18. At this time it is undecided.
>
> California Polytechnic at San Luis Obispo counts a Cr grade as a C in computing grade point average.

Authorities at some of the colleges express an opinion that a student might be a bit cautious about the number of units he attempts with a Cr grade in his major field, especially if he looks forward to doing graduate work. These people add however, that usually admittance to graduate school is based on upper rather than lower division work.

Except at Cal Poly, as noted above, GPA for admission (2.0) will be based only on letter grades.

Changing Grades

A grade may be changed only by the teacher who gave it and with the concurrence of a committee composed of the President, Dean of Instruction and Dean of Student Personnel. It may be changed only if the teacher can certify that he has made an error, except that an F grade may be changed to a W providing:

1. The student has retaken and passed the course,

or 2. he has taken at least 20 college units of C grade or better since receiving the grade,

or 3. he can prove that his situation warrants a withdrawal in a petition made to a committee appointed by the Committee on Instruction. He will be expected to show that neither of the two provisions above is reasonable in his case.

Exhibit G: Statement on general grading policies and Credit-No Credit grading at Diablo Valley College. (Pleasant Hill) Statement date: July, 1969

GRADING AT DIABLO VALLEY COLLEGE

Policy

The faculty adopted the following grading policy on May 6, 1959:

> We, the faculty of Diablo Valley College, recognize that, as a college, we have a responsibility for adopting a fair and consistent grading system. We also recognize that this system should meet our obligation to future employers of our students as well as to their future schools, colleges and universities. We believe that the fact that we are a college defines, in part, our grading standards and our responsibilities since this specifies the degree of rigor demanded by our courses and, at least partially, the ultimate objectives for each course.
>
> We believe that in a collegiate institution grades are a necessity; however, we believe that the primary learning motivation for the student should be the acquisition of knowledge and skills and the examination of attitudes and values.
>
> Finally, with faculty adherence to the foregoing assumptions and beliefs, we believe the assignment of individual grades is the exclusive responsibility of the individual instructor.

Meaning of Grades

		Grade Points
A	means that the student has been superior in meeting the objectives of the course. It is a grade of distinction.	4
B	means that the student has been outstanding in meeting the objectives of the course.	3
C	means that the student has satisfactorily met the objectives of the course.	2
D	means that the student has barely attained the objectives of the course. It is a passing but not a recommending grade.	1
F	means that the student has failed to meet the skill or industry objectives of the course.	0
W	or withdrawal may be assigned at the discretion of the instructor at the time a student withdraws from a class, although the student may expect a W if he withdraws before the end of the 6th week of instruction or is passing in his class at the time of withdrawal.	
INC	to be given at the end of the semester only when extenuating circumstances such as illness, death in family, etc. prevent the student from completing the course work within the current semester. This grade will not be given to a student who has failed to meet the course requirements in the allotted amount of time. It must be made up within I year.	

Exhibit H: Statement on Credit-No Credit grading policy from Los Angeles Pierce College. (October, 1968).

LOS ANGELES PIERCE COLLEGE
October 24, 1968

TO: All Faculty

FROM: Dean of Instruction

SUBJECT: CREDIT - NO-CREDIT GRADING

Attached is a bulletin on "Admissions Office Procedures Relative to Credit-No-Credit Offerings" being distributed to all faculty. These procedures have been devised to implement the assigning of grades using the credit-no-credit system. This alternative system of grading was authorized by the Board of Education on May 27, 1968 and Departmental Council subsequently approved implementation of this policy beginning with the Fall Semester, 1968. The purpose of this memorandum is to present some background and major elements of this new system of credit-no-credit grading now available on an optional basis to students.

BACKGROUND

When the junior colleges in 1967 sought to implement the "Pass-Fail" grading system used in four-year colleges, it was found to be against existing provisions of the Education Code which specified that a five-letter system was to be used. On June 8, 1967 the State Board of Education adopted regulations allowing "Pass-Fail" grading in the junior colleges. Subsequently, upon advice from the University of California that a "Fail" grade would be used in computing the junior college transfer student's grade point average, the State Board of Education on October 12, 1967 changed the terminology from "Pass-Fail" to "Credit-No-Credit" to facilitate transfer of the junior college student to a four-year college.

On May 27, 1968 the Los Angeles City Board of Education approved a "Credit-No-Credit Grade Policy." A copy of this policy is attached.

OBJECTIVES

The basic objective of "Credit-No-Credit" grading is to encourage a student to seek greater breadth in his college studies. The student can explore new areas, perhaps find new interests and talents, without being concerned about a possible negative effect on his academic average by competing with students majoring in fields outside his major when he ventures into other subject fields. Thus, the humanities major can enroll in the sciences and the science major in the humanities knowing that the grade point average earned in his academic major will not be reduced.

MAIN POINTS

In addition to statements in the Board policy attached, these are important elements of "Credit-No-Credit" grading:

1. The department concerned has the prerogative to specify which courses offered under its jurisdiction may be taken on a credit-no-credit basis.

2. A student may elect, not later than the end of the eighth week of the semester, whether he is to be graded under the regular letter grading system or under the credit-no-credit system. He may not change the basis on which he is to be graded after this time.

3. A student is not allowed credit for a course taken on a credit-no-credit basis if it is required as a part of his major or is required as a prerequisite for his major.

4. A student who completed a course satisfactorily ("A" through "D") and who has elected to be evaluated on a credit-no-credit basis is given a grade of "Credit." The student receives both course credit and unit credit but no grade points are earned.

5. A student who fails to perform satisfactorily in a course he has elected to be evaluated on a credit-no-credit basis is given a "No Credit" grade. This grade does not penalize the student in the sense that the units assigned to this course in which he failed to achieve satisfactorily are used in computing his grade point average; however, "No Credit" grades are considered in determining if a student is to be placed on academic probation. A "No Credit" grade is analogous to a "Fail" grade under the "Pass-Fail" system. The students receive no course credit and no unit credit.

6. Existing college and departmental regulations and standards relative to class attendance and course requirements apply equally to a student whether he has elected to be evaluated on either the five-letter grading system or the "Credit-No-Credit" system.

Any questions regarding the implementation of "Credit-No-Credit" grading should be referred to your department chairman, the Dean of Instruction, or the Dean of the Evening Division.

TO: LOS ANGELES CITY BOARD OF EDUCATION

FROM: SUPERINTENDENT OF SCHOOLS

Credit/No Credit Grade Policy

1. Credit/no credit grades are offered by the colleges of the Los Angeles City Junior College District, in accordance with the provisions of Section 130.5, Title 5, California Administrative Code.

2. Each college in the District will provide for implementation of the credit/no credit policy, including the specifying of courses which may be offered on a credit/no credit basis.

3. A student may take no more than one course in any given semester on a credit/no credit basis; a maximum of 15 units may be applied toward the Associate in Arts or Associate in Science degrees on this basis.

4. Unit and course credit will be granted on a credit/no credit basis under the following conditions:

   a. The student is held responsible for all assignments and examinations required in the course.

   b. The standards of evaluation are identical for all students in the course.

   c. A credit grade is granted for performance which is equivalent to the letter grade of "D" or better.

Los Angeles Pierce College
Office of Admissions

October, 1968

To: All Faculty, Day and Evening

Subj: Admissions Office Procedures Relative to Credit-No Credit Offerings

The Admissions Office will proceed through the following steps in handling Credit-No Credit courses and grades for the current Fall 1968 semester:

Step 1: Department chairmen will return IBM cards, indicating which courses are to be offered on a Credit-No Credit basis.

Step 2: Data Processing Unit (DPU) will identify instructors and ticket numbers for all courses offered on a Credit-No Credit basis.

Step 3: IBM cards bearing the names of all students in courses identified in Step 2 will be sent to the instructors concerned. (During the 7th week, October 28 - November 1).

Step 4: During the 8th week, instructors in Credit-No Credit courses will identify those students who wish to take the courses on a Credit-No Credit basis. The IBM cards for these students only will be returned to the Admissions Office not later than Friday, November 15, (end of the 9th week), via Dr. Hadel's mailbox, or will be given personally to Supervising Clerk, Marge Sallander, in the Admissions Office.

Step 5: DPU will screen the cards returned by all instructors to determine whether or not any student has decided to take more than one course on a Credit-No Credit basis. (Regulations state "A student may take no more than one course in any given semester...")

Step 6: If any student has indicated more than one course on a Credit-No Credit basis, he will be called in to the Admissions Office for the purpose of determining which one course he will take on a Credit-No Credit basis.

Step 7: DPU will prepare printed lists of student's names and the courses in which each is enrolled on a Credit-No Credit basis. These lists will be sent to the instructors concerned. If any discrepancies appear on the lists, Dr. Hadel is to be notified immediately, via his mailbox or phone, extension 204.

Step 8: At the end of the semester, grade cards will be issued for all students containing "bubbles" for grades A, B, C, D, F, Credit, and No Credit. (IMPORTANT NOTE: If a letter grade, A, B, C, D, or F, is assigned to a student who earlier declared for a Credit-No Credit basis, the grade report will automatically show a grade of "INCOMPLETE." Conversely, if a grade of CREDIT or NO CREDIT is assigned to a student who did not earlier declare for such grading, the grade report will also automatically show a grade of "INCOMPLETE." Such "INCOMPLETE" grades must be corrected by the instructor through the Office of Instruction).

If you have questions, please call the Admissions Office, extension 204. Thank you for your cooperation.

Exhibit 1: Statement on Credit-No Credit grading policy from Sacramento City College. (Statement date: October, 1968.)

SACRAMENTO CITY COLLEGE

TO: Administration & Faculty October 24, 1968

FROM: Paul Hunter, Chairman, Petitions and Scholarship Committee

SUBJECT: Credit-No Credit Classes (File in Faculty Handbook, section 4295)

Background Information:

Section 130.5 Title 5 of the California Administrative Code authorizes junior college districts to implement "credit-no credit" courses.

This addition to Title 5 was recommended by the Junior College Advisory Panel after hearing the view of representatives of the junior colleges, state colleges and the University of California.

The impetus to consider the "credit-no credit" concept came from legal opinion presented to the State Department of Education that pass-fail grading is illegal. This opinion, plus statements offered by representatives from junior college districts, reflecting general dissatisfaction with pass-fail grading, resulted in a recommendation that in part stated:

> "to facilitate the transfer of students from one segment of higher education to another, the grades "credit-no credit" be substituted for the grades "pass-fail" (on the basis of a statement by the university representative that "fail" would generally be computed in the grade point average as an F)"
>
> ("Reference - Bulletin from Archie McPherran, Acting Chief, Division of Higher Education, October 25, 1967)

The recommendations of the Junior College Advisory Committee were reflected in the regulations adopted by the State Board of Education on October 12, 1967.

The presentation to the Los Rios Junior College District Board of Trustees recommending adoption of credit-no credit courses was based, in part, on the premise that:

1. Students would more readily explore fields of study outside their major if no specific letter grades were assigned.
2. Students may be encouraged to remain in a course instead of withdrawing if doubtful of their progress.
3. "Failure" in a "credit-no credit" course would not jeopardize the student's scholastic standing. This policy has particular importance for the junior college in that the students lacking academic background or orientation could complete a semester of study without being threatened with poor or failing grades.

General Statement of Policy:

The authorization to develop procedures for implementing "credit-no credit" classes at Sacramento City College is contained in the approved school board minutes dated August 7, 1968. The following statements are therein contained:

1. The colleges of the Los Rios Junior College District are authorized to offer courses in the following categories:
   a. Courses wherein students are evaluated on a credit-no credit basis. (This applies to courses currently listed in the SCC catalog as "pass-fail" (e.g., Psychology 40, 80, 81.)
   b. Courses wherein each student may elect on registration, or within a reasonable time thereafter to be determined by each college, whether the basis of his evaluation is to be a "credit-no credit" or letter grade.
2. Each college of the Los Rios Junior College District may develop procedures whereby a student who has received credit on a "credit-no credit" basis within the district be permitted to convert this grade to a letter grade by taking an appropriate examination.
3. Each college is authorized to develop additional procedures to implement a "credit-no credit" grading policy.

Procedures to be Followed on a Trial Basis this Year:

1. Student may elect to take any class "credit-no credit."
2. Student may declare intent to take a course "credit-no credit" up to the date to drop a class without penalty. (The fall, 1968, semester date is Wednesday, November 13.)
3. The request form is obtained from the counselor and must have his approval.
4. The teacher receives a copy of the request form from the student to serve as a contract agreement for marking the scanning sheet for final grades.
5. A maximum of 15 units of "credit" classes may be applied toward the AA degree.
6. The teacher would also maintain letter grades for students taking a course "credit-no credit." The final grade reporting sheet turned in by the teacher would show a letter grade entered in the far left margin as well as "credit" or "no credit" marked in the appropriate place.
7. The mark of "credit" if equated on the final grade sheet as a "D" grade would not qualify a student to continue in sequential courses requiring a "C" or better grade to progress.
8. District policy permits the student to request that the "credit" mark be converted to a letter grade. Recording the letter grade on the final grade sheet for students taking a course "credit-no credit" would make it possible for the Registrar's Office to convert the "credit" grade without requiring any additional effort on the part of the teachers.
9. Students may repeat, for a grade, a course in which they received a mark of "credit". Upon completion of the course, units received for "credit" would be deleted from the permanent record.
10. "Credit" is charged as units earned but is not reflected in the GPA. Units earned for a mark of "Credit" are not considered in computing GPA.

For further clarification, faculty members are urged to consult with their division chairman.

An evaluative report on the operation of this policy and the implementing procedures will be given to the Los Rios Board of Trustees at the end of the year.

The following individuals have contributed to the development of this proposed policy to implement "credit-no credit" classes:

Sam Kipp
Paul Gould
Gene Wutke
Charles Myers
Gene Dyke
Charles Nadler
Paul Hunter
Naola Watson
Ken Humphreys

PH:vs

Exhibit J: Statement of Credit-No Credit grading policy from Santa Rosa Junior College. (Statement received: July, 1969.)

SANTA ROSA JUNIOR COLLEGE

CREDIT/NO-CREDIT GRADING

A POLICY STATEMENT

The following plan, to offer courses on a credit/no-credit basis, provides an opportunity for students to pursue studies beyond their fields of major interest. General education is encouraged because the credit/no-credit option allows for:

(1) Exploration of varying disciplines without penalty;

(2) Developing an interest in subject-content with which the student is basically unfamiliar; and,

(3) Study in an atmosphere of reduced competition--this because of lesser pressure for grades in general, and the elimination of an unrealistic competitiveness created by enrollment of both majors and non-major students in the same course.

Therefore, it is the policy of Santa Rosa Junior College to enable students to take courses on a credit/no-credit basis as interpreted in Section I, Section 130.5, Title V, California Administrative Code.

A. COURSES AND CREDIT/NO-CREDIT GRADE ASSIGNMENT

1. Each department shall determine the courses it designates as appropriate for credit/no-credit grading by placing all department offerings in one of the following categories:

   a. Grades will be determined by student option according to a choice between letter grades and credit/no-credit grades; or,

   b. All grades in the course shall be assigned on a letter grade basis. Courses used for progression in subject sequence or for fulfillment of a prerequisite, where a "C" grade is necessary, shall be placed in this category.

2. Courses designated in the above categories shall be identified in the college Catalog, Schedule of Classes, and on course outlines filed in the Office of Instruction.

3. The list of categories (a-b) shall be reviewed annually and noted in the Catalog, Schedule of Classes, and on course outlines filed in the Office of Instruction.

4. Departments may require majors and/or minors to obtain letter grades in that department's major or minor curriculum requirements so that:

    a. the major and/or minor curriculum requirements may be accepted as entrance requirements to the upper-division; and,

    b. prerequisites for subject-matter sequences may be fulfilled.

B. GENERAL

1. Units earned on a credit/no-credit basis will be counted toward satisfactory completion of the unit or subject requirement for the A.A. degree.

2. All units earned in courses offered on a credit/no-credit basis shall be disregarded in determining a student's grade point average for all purposes for which a grade point average is required. Therefore, academic honors, as well as probation and dismissal standards, are separate and distinct from the entire consideration of credit/no-credit courses.

3. Limitations are placed on the number of courses and units to be taken according to credit/no-credit. Students are limited to a total of twelve (12) units, with the further provision that no more than one (1) course can be scheduled during any one semester or summer session.

4. Initially, all students will register for all courses on a letter grade basis. Students can exercise their option to change registration from a letter grade to a credit/no-credit grade between the deadlines for adding and dropping classes.

C. GRADING

1. The credit grade is defined as completion of course requirements (interpreted as a letter grade of "D" or better).

2. A no-credit grade is defined as "course requirements not completed for credit."

3. When a student has established the basis of a grade, either as credit/no-credit or as a letter grade, he cannot change after the established deadline.

4. Credit/no-credit grades will be recorded on student transcripts as "CR" (credit) and "NC" (no credit).

5. An "incomplete" grade for a credit/no-credit class is removed according to provisions established for removal of an "incomplete" grade rendered in a letter grade course.

BT:lb
5-19-69

TO: Faculty

FROM: Brook Tauzer

SUBJECT: Credit/No-Credit Grading

There is now in effect (beginning with Summer, 1969) a policy at Santa Rosa Junior College allowing for grading on a basis other than the traditional A, B, C, D, F. A copy of the policy is attached.

Each department has determined its own participation in the new grading procedure. Roughly, 46% of the courses can be graded on a credit/no-credit basis.

The schedule of classes for Fall Semester, 1969-1970 (day and evening) was published too early to indicate those courses in which students can exercise an option. Therefore, the following listing identifies the grading status of each course, by symbol, according to:

#1 - letter grade MANDATORY

#2 - student option: either a letter grade or a credit/no-credit grade can be chosen

AERONAUTICS - all courses #2

AGRICULTURE - all courses #1, except Agriculture 151A = #2

ANATOMY - all courses #2

ANTHROPOLOGY - all courses #2

ART - all courses #2

ASTRONOMY - all courses #1

BACTERIOLOGY - all courses #2